

Studies Toward a Design Approach
for Public Gathering Facilities

by

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ABSTRACT

A set of design studies examines the ways in which the ongoing, routine activities of an educational institution may interact with a variety of ceremonial public gathering events related to its curriculum, through the shared physical presence of its building facility.

An existing music school is analyzed to provide a source for introductory design information. Concurrently, some similar buildings are examined to facilitate generalized analytic observations. The above two steps form a foundation for a schematic design exercise intended as a vehicle to illuminate some of their possible formal consequences. Graphic documentations include fragments of design process steps and the resulting schematic design proposal.

Thesis Supervisor: Chester L. Sparague

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4

TABLE OF CONTENTS

1. INTRODUCTION
2. THE NEW ENGLAND CONSERVATORY OF MUSIC
 - 2.0 List of Figures
 - 2.1 Introduction
 - 2.2 Existing Buildings: 1. Activity Patterns
 - 2.3 Existing Buildings: 2. Observation and Analysis
With Projections Toward Alterations
3. PRELIMINARY STUDIES
 - 3.0 List of Figures
 - 3.1 Sequential Ordering
 - 3.2 Manners of Interaction
 - 3.3 The Lobby
4. DESIGN STUDIES
 - 4.0 List of Figures
 - 4.1 Program
 - 4.2 Diagrammatic Development
 - 4.3 Spatial Disposition
 - 4.4 Principal Components
5. GRAPHIC DOCUMENTATION: SCHEMATIC PROPOSAL
 - 5.0 List of Figures
6. SUMMARY
7. NOTES
8. SOURCES AND REFERENCES

6

1. INTRODUCTION

The act of public gathering assumes a significant position in the lives of urban dwellers today. Many derive pleasure in preparing for attendance, travelling to the location of gathering, actually taking a part in it, and reminiscing over it afterwards. Beyond the basic purpose of appreciating the featured event such as a theatrical production or works of music, public gathering events provide an opportunity for people to see themselves and others in a ceremonial setting, somewhat different from the ordinary. Apart from a few old friends that one might happen to spot, these gathering events draw together a large number of unrelated individuals, and may serve to remind the urban dwellers that a shared experience among a large number of people has pleasant attributes, and that the domain of his being

can extend beyond individual homes and local neighborhoods to embrace the city or even a larger region in which such events occur.

A primary influence on the character of experience in such a gathering event is the built environment in which the event takes place. Great efforts and resources have been expended toward creating such civic buildings as concert halls, opera houses, and theatres which heighten the sense of ceremony and festivity surrounding the event inside. Such significant buildings may also serve the urban dweller as a landmark with which to orient one's whereabouts within the city.

Although the public gathering place often attains a liveliness and sense of festivity that no other building form can equal, their status when not in use as a performing center tend to be that of a large inaccessible

building with little sign of life inside. In such a state the sole function the building can hope to serve is as a decorative wall surface to the streetscape. The situation is greatly remedied when the public gathering function is part of a larger assemblage of activities in the building. This combination of functions provides opportunities to associate visually, if not actively, portions of the building used primarily at performance times with other uses.⁽¹⁾ The association of a public gathering facility, with some daily, ongoing function comprise a hybrid building type which raises issues of architectural concern in the areas of building organization, vocabulary, etc.

This study investigates the issues involving the building type in which large public gatherings and many routine daily activities are accommodated simultaneously.

10

Educational facilities for the performing arts particularly, have traditionally represented this hybrid design, in combining large performance or gathering spaces with their daily functions as educational institutions. This study examines one such facility, the New England Conservatory of Music, in Boston, Massachusetts. The New England Conservatory provides a model for investigative design work, as it is neither too small to make decisions at scales beyond room-to-room scale, nor too large to permit an adequate grasp of the various activities and their relative impact on the interior composition of the building. After examining the present structure and its design solutions for music education, and alternative multiple uses existing within, the study then proposes an alternative schematic design. The following document consists of a brief study of the Conservatory's school

activities and public gathering functions, a preliminary study into some general aspects of buildings of similar nature, a description of general and specific aspects elaborated upon in the design study, and a resulting schematic proposal.

12

II. THE NEW ENGLAND CONSERVATORY OF MUSIC

2. THE NEW ENGLAND CONSERVATORY OF MUSIC

2.0 List of Figures

1. Students at work. Catalogue, New England Conservatory of Music.
2. Students at work. Catalogue, New England Conservatory of Music.
3. Original plans by Wheelwright and Haven. The Brickbuilder, volume 12, number 2.
4. The Conservatory and its surroundings seen from above.
5. The present configuration with Brown Hall addition to right and dormitory/library building to left.
6. Rehearsal session in Jordan Hall.
7. Brown Hall's audience floor is used here as a large rehearsal space.
8. View into the audio library.
9. Orchestral score library.
10. View into the piano shop.
11. View into the piano shop.

12. Plan, existing building facilities, New England Conservatory of Music. See Note #2.
13. Plan, existing building facilities, New England Conservatory of Music. See Note #2.
14. Plan, existing building facilities, New England Conservatory of Music. See Note #2.
15. Plan, existing building facilities, New England Conservatory of Music. See Note #2.
16. Typical studio session. Catalogue, New England Conservatory of Music.
17. View into the corridor. Lack of waiting and lounging places is evident here.
18. Student finds Brown Hall lobby suitable for practicing. Catalogue, New England Conservatory of Music.
19. View into Huntington Avenue side lobby. Although its entrance is sealed, this lobby retains the sense of being a central feature of the school.
20. View into the corridor.
21. Around mailboxes can be a place of encounter and exchange.

22. View of the existing building from above.
23. Diagrams identifying principal formal components.
24. View of the main entrance.
25. Original access patterns for:
 - a. into Jordan Hall
 - b. into Williams Hall
 - c. into Brown Hall
 - d. into School proper.
26. Existing access patterns:
 - a. into Jordan Hall
 - b. into Williams Hall
 - c. into Brown Hall
 - d. into School proper.
27. The entrance lobby off Gainsborough forms a juncture of two circulation patterns.
28. Views of the Williams Hall lobby. Columns serve to loosely define the lobby domain.

2.1 Introduction

The New England Conservatory of Music, founded in 1867 by Eben Tourjee, is the oldest independent conservatory of music in the United States. The Conservatory, located at 290 Huntington Avenue, Boston, specializes in preparing musicians for professional careers in performance and teaching. It maintains a strong tie with the Boston Symphony Orchestra, many of whose musicians give studio instructions at the Conservatory. The Conservatory students and faculty engage in an active program of performances which number approximately 300 annually.

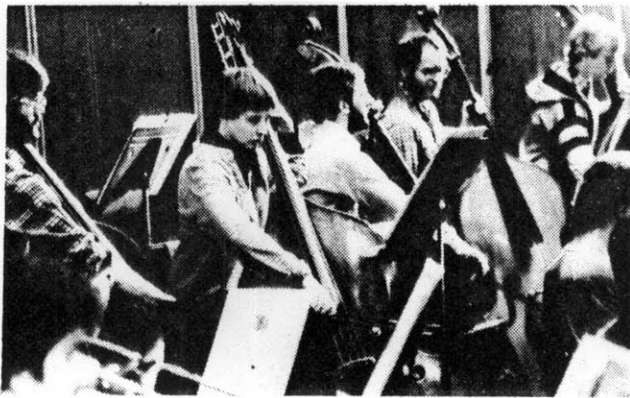
The Conservatory is primarily a collegiate institution with diverse programs at preparatory and post-graduate levels, accommodating both youth and adults. The school enrolls approximately 650 full-time equivalent

1



students (some full-time and some part-time) in five academic divisions. The School of Undergraduate Studies offers accredited undergraduate degrees in music, and in liberal arts (in conjunction with Tufts University), as well as non-academic diploma and certificate programs. The School of Graduate Studies offers Masters' degrees and sponsors artists-in-residence programs. The Summer School offers instruction, performance workshops and master classes. The Extension Division accommodates pre-college preparatory students, an Adult Education Program, and a training program in piano technology consisting of timing, regulating, repair and introductory rebuilding. The Community Services Division is aimed toward assisting disadvantaged individuals in preparing for musical education and professional careers. A majority of the faculty serve on a part-time

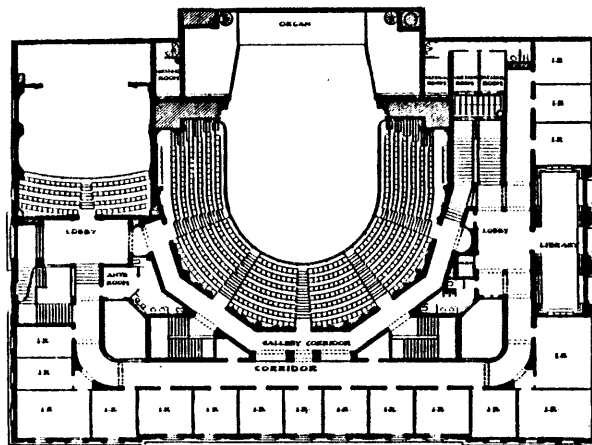
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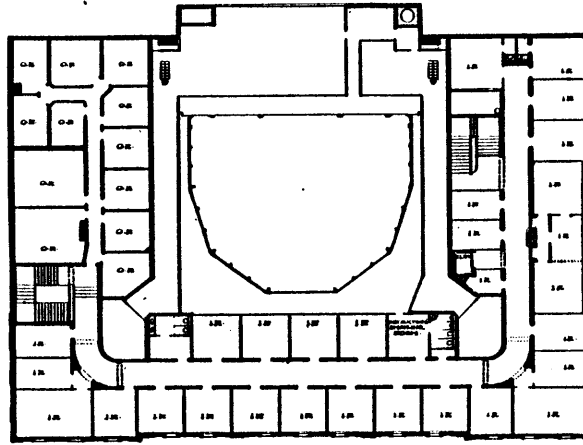
basis, pursuing performance activities as well. The principal mode of instruction is the instrumental studio in which individual instructions are given in the instrument of specialization. The major studio is supplemented by ensemble and chamber work, theory and history courses and liberal arts courses. The Conservatory stresses the importance of small classes of instruction, and the typical class size ranges between fourteen and thirty-five students. Conservatory programs include ragtime, third stream music, and jazz as initiated under Gunter Schuller in addition to the mainline absolute music.

2.2 Existing Buildings: 1. Activity Patterns

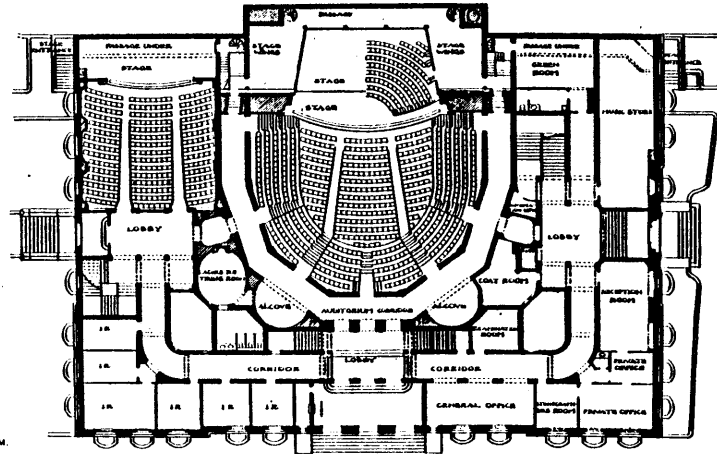
The New England Conservatory relocated to its present site in 1903 upon completion of its main building designed by Wheelwright and Haven, following Frederick



SECOND FLOOR PLAN.



THIRD FLOOR PLAN



FIRST FLOOR PLAN

I. R. INSTRUCTION ROOM.
O. R. ORGAN ROOM.

3

PLANS, NEW BUILDING FOR THE NEW ENGLAND CONSERVATORY OF MUSIC, BOSTON, MASS.
WHEELWRIGHT & HAVEN, ARCHITECTS.

Law Olmsted's reclamation of the Fens and the subsequent development of the last remaining section of the Back Bay mudflats. During this period a number of educational and cultural institutions moved to the area near the new Conservatory. These included the Massachusetts Horticultural Society (1901), the Boston Museum of Fine Arts (1909), and Isabella Gardner's Fenway Court (1903). Convenient transportation provided by the streetcars seems to have encouraged building of four musical institutions very close to each other in this area. The New England Conservatory's neighbors included Symphony Hall (1900), Chickering Hall (1901, later the St. James Theatre, demolished) and the Boston Opera House (1908, demolished). A large number of cultural, civic and educational institutions, in addition to those mentioned above, notably the Northeastern University,

22

4



the Christian Science Center and later the Prudential Center, seem to point toward an active cultural future of the stretch of Huntington Avenue from Copley Square to the Fenway, *awaiting* the establishment of the Copley area as a major urban focus and upgrading the residential neighborhood surrounding the stretch.

The existing New England Conservatory building consists of three parts, the first of which is the original Wheelwright and Haven building of 1903. The original building featured two performance spaces, Jordan Hall, seating over 1,000, and a small recital hall, Williams, accommodating approximately 300. The school's ordinary functions were accommodated in the form of instruction rooms, offices, a library and a music store, placed along the periphery of the building. The second part, to the back of the main building, was added in 1927, to house

24

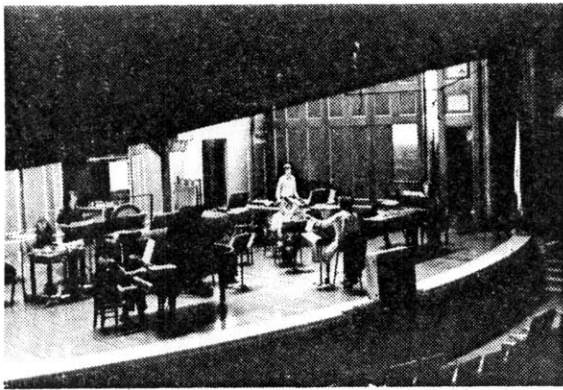
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Brown Hall, a third performance space for approximately 500, with a flat floor, and additional instruction rooms. This addition was treated as an attachment to the original building, finished in fairly consistent vocabulary, and it reads as an integral bay of the main building. The third part is much more recent, built in 1960, across Gainsborough Street from the present main entrance to the original building. This portion contains the dormitory in which all of the first-year collegiate students, and some upper-year students are housed, their dining room and a newly expanded library.

To characterize the present use pattern or building program of the Conservatory, one might start with the performance spaces which, because of their sheer size, specialized shape and organization, seem to exert a decisive influence upon the building form and the

26
6,7

experiences within. All of the three performance spaces are used heavily, a bit overused, if one might speculate. The following tables list a sample month's length of daily performance programs. Note that on most days each hall is used at least once, and frequently twice. When allowances are made for need for dress rehearsals in the performance hall, ensemble rehearsal sessions which require the large spaces not found elsewhere, and the adjustment and preparation in between of stage chair arrangement, lighting, etc., this listing probably represents a phenomenally high loading level of almost continuous occupancy during the times of the building's operation. It should also be noted that some of the scheduled events do not have any affiliation with the Conservatory. These events are independently sponsored, and the Conservatory collects a fee for the use of

its performance spaces. Thus the assembly spaces are a means of generating income as well as necessary tools of the Conservatory's instruction. The lobby spaces for the assembly volumes form another significant part of the building's spatial composition. The peculiar and characteristic nature of these spaces will be discussed further below.

Another major component in the existing program is comprised of the libraries. Through cycles of growth and subsequent space re-allocation, the library now assumes a highly fragmented form with book and musical scores collection housed in the most recent addition, choral scores in the basement of the main building, orchestral scores below the entrance lobby to Brown Hall; and the recording and audio material collection established and named as a separate library, located

8



Table : Sample Schedule of Events

	JORDAN	BROWN	WILLIAMS
SUN			
1	Faculty Recital 3:00 Bos. Aria Grp. \$3.	Senior Recital 4:00 Clarinet	
	Boston Opera 8:00 \$	Faculty Recital 8:00 African Drum Dance	
MON			
2		Master's Recital 8:00 Viola	Afro-Amer. St. Comp. 8:00
TUE			
3	Colles. Mus. 8:00 (ensemble)	Audio Eng. Sol Lec. 7:30	
WED			
4	Rep. Wind Ens. 8:00	Black St. Union 8:00 Black Music	
THU			
5			
FRI			
6	Banc. Musical \$	Senior Recital 8:00 Cello	
SAT			NEC Comm. Serv. Dept. 11:00 Jazz
7	Mass. Youth Wind Ens. 3:00		Prep. Sch. Stu. Rec. 1:00
	Juilliard String Qrt. Quartet \$	Senior Recital 8:00 Violin	

	JORDAN	BROWN	WILLIAMS
SUN			
8		Senior Recital 4:00 Oboe	
	Artists Piano Rec. 8:00 Piano	Student Recital 8:00 Flute	
MON			
4		Stu. Compositions 8:00	World's Mus. Ensem. 8:00, Contemp. Black Classical Music
TUE			
10		Gospel Jubilee, Church Choirs	
WED			
11	NEC Symph. Orch. 8:00		Master's Recital 8:00 Voice
THU			
12	Faculty Recital 8:00 Guitar		Master's Recital 8:00 Piano
FRI			Piano Master Class: Fac. Art., 4:30-11:30
13	Concord Strng. Qrt. 8:00 \$	Senior Recital 8:00 Clarinet	Senior Recital 8:00 Voice
SAT			
14			Student Recital 4:00 Trumpet/Trombone
		Senior Recital 8:00 French Horn	

	JORDAN	BROWN	WILLIAMS
SUN 15	-----		
		Senior Recital 4:00 Afr. Amer. Sax.	Senior Recital 4:00 Trumpet
	Artists Diploma Rec. 8:00 Piano		Student Recital 8:00 Flute
MON 16	-----		
			Student Recital 8:00 Trumpet
TUE 17	-----		
	Faculty Recital 8:00 Piano		Student Recital 8:00 Clarinet
WED 18	-----		
	Faculty Recital 8:00 Piano Trio	Coll. Museum 8:00 Theatrical	Master's Recital 8:00 Voice
THU 19	-----		
	NEC Rep. Orchestra 8:00		
FRI 13			Piano Master Class: Fac. Art., 9:30-11:30
		Master's Recital 8:00 Bassoon	Senior Recital 8:00 Voice
SAT 21	-----		
			Master's Recital 4:00 Voice
		Senior Recital 8:00 Voice	Student Recital 8:00 Oboe

	JORDAN	BROWN	WILLIAMS
SUN 22	-----		
		Ext. Div. Fac. Rec. 3:00 Piano	Senior Recital 4:00 Piano
			Senior Recital 8:00 Bass
MON 16	-----		
	Contemporary Jazz		Senior Recital 8:00 Cello
TUE 24	-----		
	Artists' Dip. Rec. 8:00 Piano	Student Recital 8:00 Bass/Trombone	Student Recital 8:00 Flute
WED 25	-----		
	NEC Chamber Singers 8:00	Student Recital 8:00 Piano	Master's Recital 8:00 Piano
THU 26	-----		
	NEC Wind Ensemble 8:00		Senior Recital 8:00 Voice
FRI 27			Piano Master Class: Guest Art. 4:30-11:30
		Master's Recital 8:00 Bassoon	Student Recital 8:00 Piano
SAT 28	-----		
			Master's Recital 4:00 French Horn
	Ban. Musicians 8:00	Student Recital 8:00 Oboe/Bass	Student Recital 8:30 Third Stream

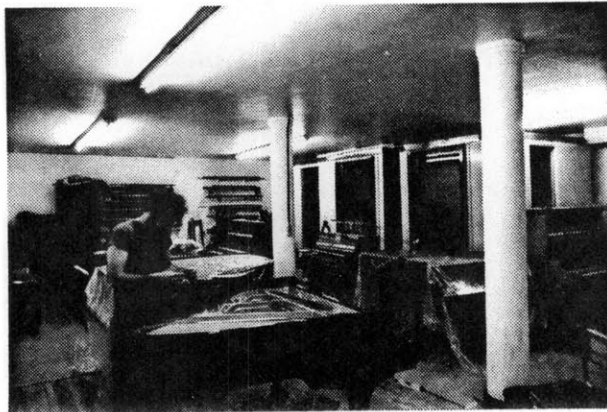
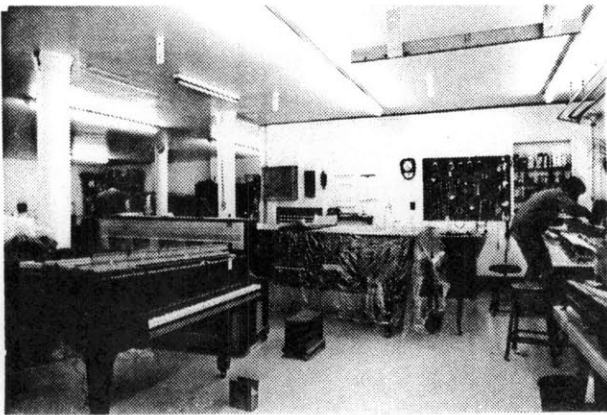
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9



directly underneath Brown Hall. The Harriet M. Spaulding Library accommodates roughly 43,000 catalogued volumes, mostly related to music and some in the liberal arts. It also holds a sizable collection of composers' original manuscripts and letters. The Isabelle Firestone Library holds the Conservatory's collection of over 12,000 recordings on disc and tape. Listening arrangements range from individual headphones within a desk setting or lounging setting through group listening in acoustically isolated (glass-enclosed) sub-spaces to a seminar room. The choral and orchestral libraries are essentially catalogued warehouses of major ensemble works for which multiple copies must be maintained for performance uses, stored en masse. The music store shown in the original plan is no longer in existence, its space having been swallowed by the expanding needs of the functions of

10, 11



the school proper. Part was converted for administration use and the rest for a chamber music room which doubles as a display area for some of the Conservatory's rare instrument collection.⁽⁴⁾ Other notable activity spaces include a copying service in the basement and a piano shop below Williams Hall. The remaining portions of the Conservatory building consist of administrative and faculty offices, various studios and classrooms and chamber music studios, all of which are fairly neutral in many attributes. The chamber music studios are simple combinations of individual studios, two at a time, resulting in a long narrow room roughly twice the size of a typical room (office or studio). Their location seems to follow certain ordering patterns: the administration offices are found in areas of greater exposure to the public, some special instrument studios are placed in

32

groups, etc., but the physical characteristic of the rooms can be summarized in terms of one average size or its multiple, relationship to the circulation, and correspondence to the edge of the building as the private rooms are felt to require exterior light, ventilation, etc.

The dormitory building houses approximately 170 students in doubles with some singles, practicing rooms, and dining and lounging activities, in addition to the book library mentioned earlier. The following table summarizes the present Conservatory building program:

Existing Building Program, New England Conservatory

Part 1. Assembly Spaces

Jordan Hall	1,019 seats	527 floor 492 balcony Mainly for concerts Stage size: 12m x 9m
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Brown Hall	482 seats	420 floor 62 balcony Floor seats removable on flat floor For concerts, lectures, banquets, private dances Stage size: 7.5m x 4.2m
Williams Hall	304 seats	222 floor 82 balcony Recitals Stage size: 6m x 4.2m

Part 2. Libraries

Harriet M. Spaulding Library with 8 Listening Rooms	590 m ² 50 m ²	
Isabelle Firestone Audio Library	330 m ²	Includes 2 Listening Rooms and 1 Seminar Room Orchestral scores
Performance Library	160 m ²	
Choral Library	100 m ²	

Part 3. Remaining School Functions

Copying Service	110 m ²
Recording Studios (2)	80 m ²
Piano Shop	210 m ²
Practicing Rooms (14)	200 m ²
Instrumental Studios (45)	1,025 m ²
Faculty Offices (12)	225 m ²
Administration (37)	1,020 m ²
Classrooms and/or Chamber Music Studios (20)	850 m ²

34

Part 4. Dormitory

Dining Room	190 m ²
Common Room	100 m ²
Kitchen	80 m ²
TV Lounge (1)	
Floor Lounge	7 @ 260 m ² each, one/floor
Bathroom	7 @ 260 m ² each, one/floor
Practice Rooms (14)	140 m ²
Rooms for 170 students	8% in single @ 12m ² each 92% in double @ 16m ² each

2.3 Existing Buildings: 2. Observation and Analysis
with Projections Toward Alterations

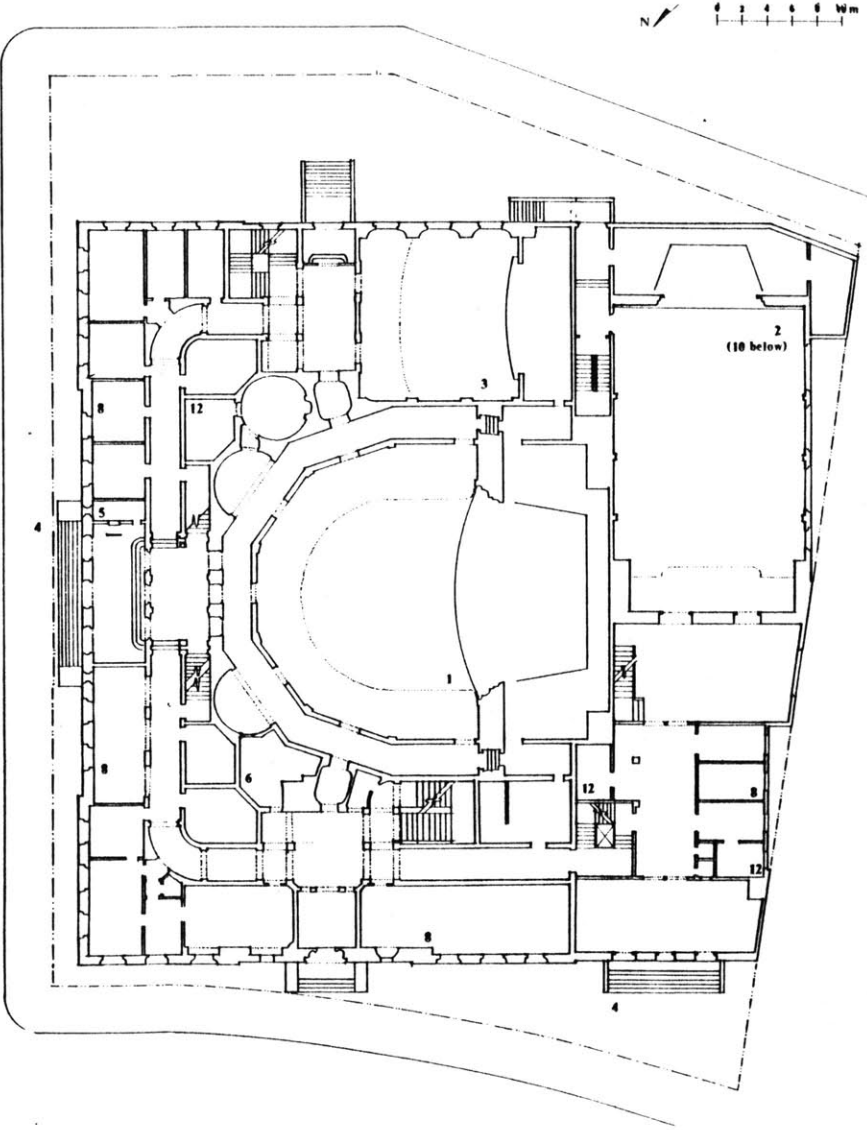
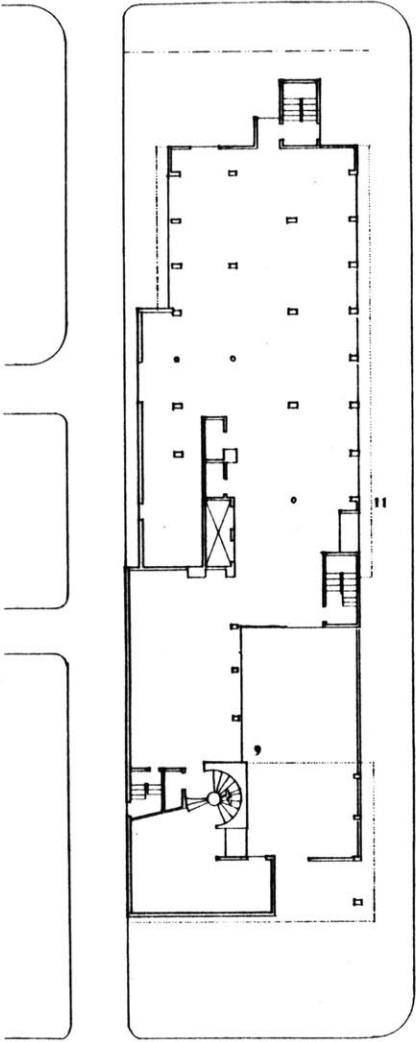
In observing the existing building of the New England Conservatory certain characteristics are worth noting and may serve to inform any future design effort for a building of similar nature. It is the intention of this study to utilize the existing facility of the Conservatory as a starting point in generating some of the necessary information for the redesign exercise to follow. Upon close examination, the building reveals itself as a

rich assemblage of important and interesting aspects characteristic of this building type. Among the more pertinent aspects to be dealt with here are issues of dimension and interconnectivity; range and character of spaces within the context of present activity pattern; resolution of forms; and the topology of spatial sequence and their interaction.

The basic problem in the original design seems to have been to fit the large assembly spaces and the arrays of small office or room-sized cubicles within the given dimensions of the available lot. Tight dimensional constraints of the site yielded some rather atypical room sizes and proportions along the perimeter of the building, which, afterall, is the most logical place to find individual room-sized spaces.⁽⁵⁾ These spaces, where combined in a pair with the common partition removed, result in some

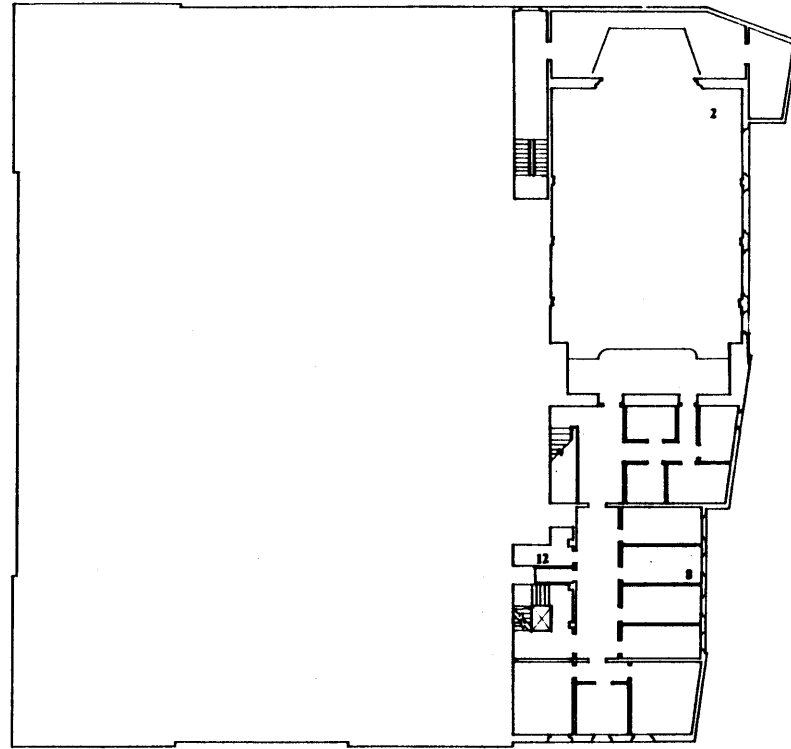
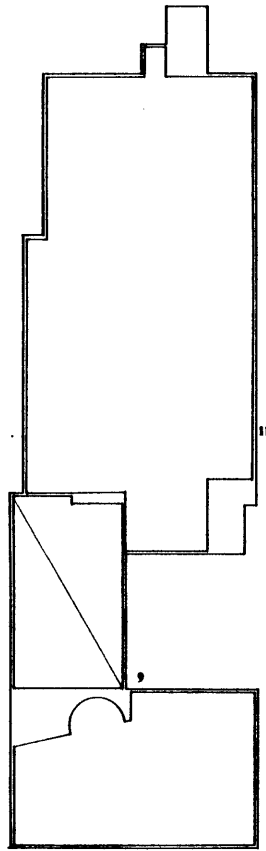
PLAN: GROUND LEVEL

1. Jordan Hall
2. Brown Hall
3. Williams Hall
4. Entrance
5. Tickets
6. Coats
7. Instruction Rooms
8. Offices
9. Spaulding Library
10. Firestone Audio Library
11. Dormitory
12. Restroom



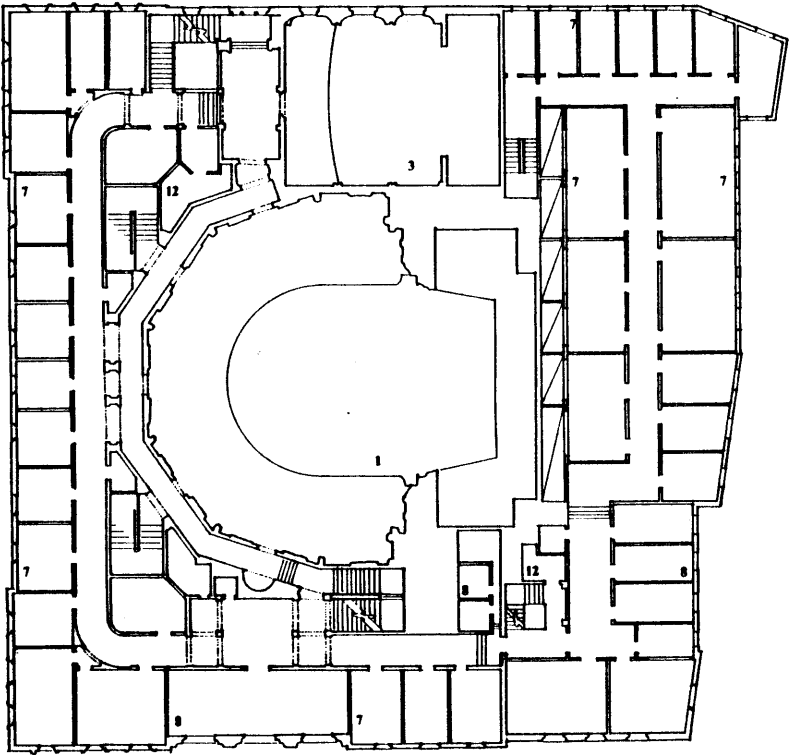
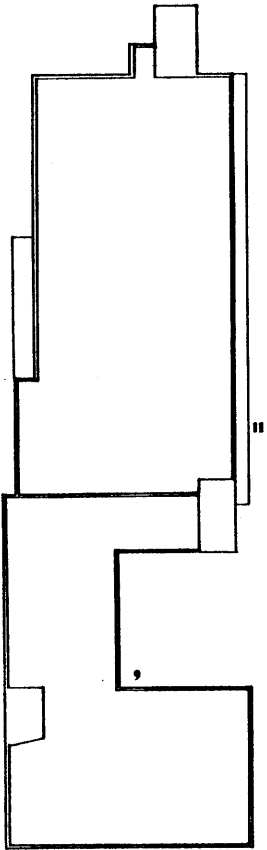
PLAN: MEZZANINE LEVEL

1. Jordan Hall
2. Brown Hall
3. Williams Hall
4. Entrance
5. Tickets
6. Coats
7. Instruction Rooms
8. Offices
9. Spaulding Library
10. Firestone Audio Library
11. Dormitory
12. Restroom



PLAN: SECOND LEVEL

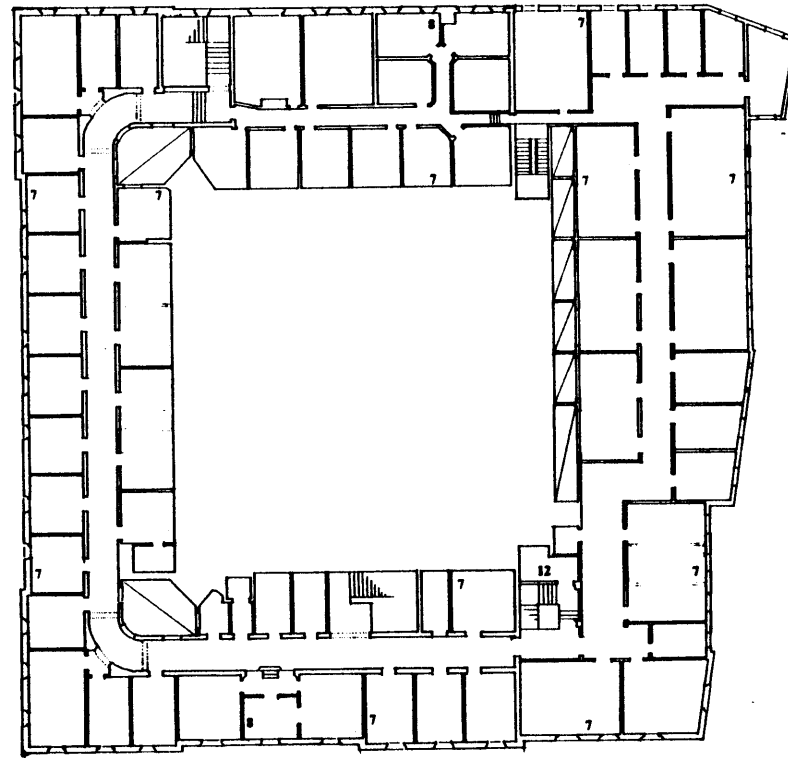
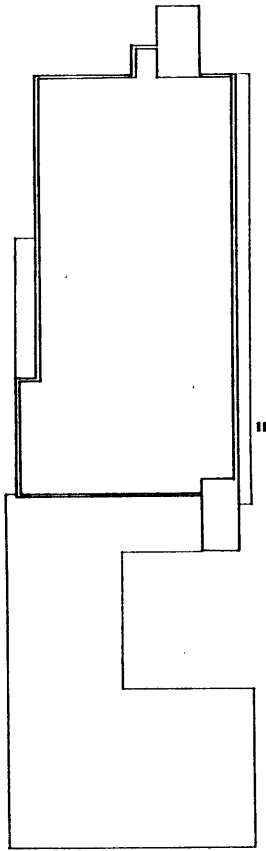
1. Jordan Hall
2. Brown Hall
3. Williams Hall
4. Entrance
5. Tickets
6. Coats
7. Instruction Rooms
8. Offices
9. Spaulding Library
10. Firestone Audio Library
11. Dormitory
12. Restroom



42

PLAN: THIRD LEVEL

1. Jordan Hall
2. Brown Hall
3. Williams Hall
4. Entrance
5. Tickets
6. Coats
7. Instruction Rooms
8. Offices
9. Spaulding Library
10. Firestone Audio Library
11. Dormitory
12. Restroom



49

classrooms of awkwardly long, narrow proportions. Some practice rooms in the basement are simply very narrow, at approximately five feet. These rooms are barely enough for an upright piano and a student playing it, precluding any possibility of instructional or group use.

As mentioned earlier, the libraries have no physical interconnection. This makes cross-referencing difficult. Since the activities of libraries might be of some public interest, a view into them might enrich the more public portions of the building.

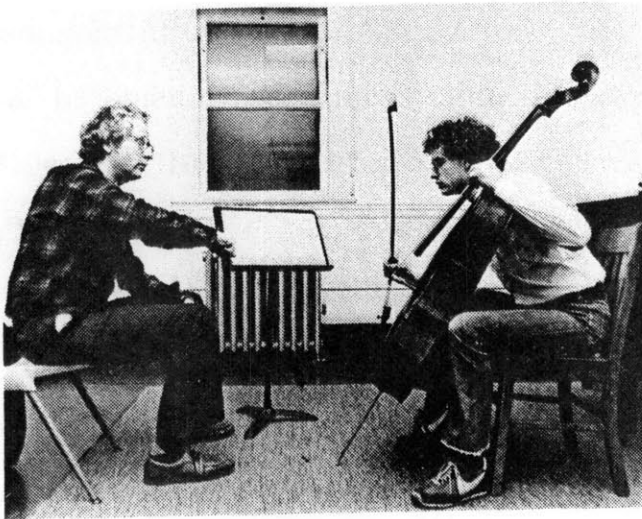
There is also a lack of larger rehearsal spaces, resulting in a chief demand for the three performance spaces for common rehearsals and ensemble work in addition to the usual dress rehearsal sessions.

A peripheral layer of sufficiently deep space which can be segmented with non-structural partitions into

individual rooms has the virtue of permitting variable room sizes to accommodate a full range of performance and rehearsal group sizes. However, some of the largest groups such as chamber orchestras, demand a higher than normal ceiling level.

The Conservatory displays an overall need for additional spaces for administration offices, faculty offices, and studio facilities. The Conservatory is currently considering purchase of a nearby building for expansion. Among these areas of need, the faculty facility may be notable. As many of the faculty members serve on a part-time basis, the typical faculty member might be pictured as a practicing musician who visits the Conservatory only when he is scheduled to conduct a studio session, in one of the studio rooms. Such rooms are assigned on an hourly basis, and typically, contain a

16



18

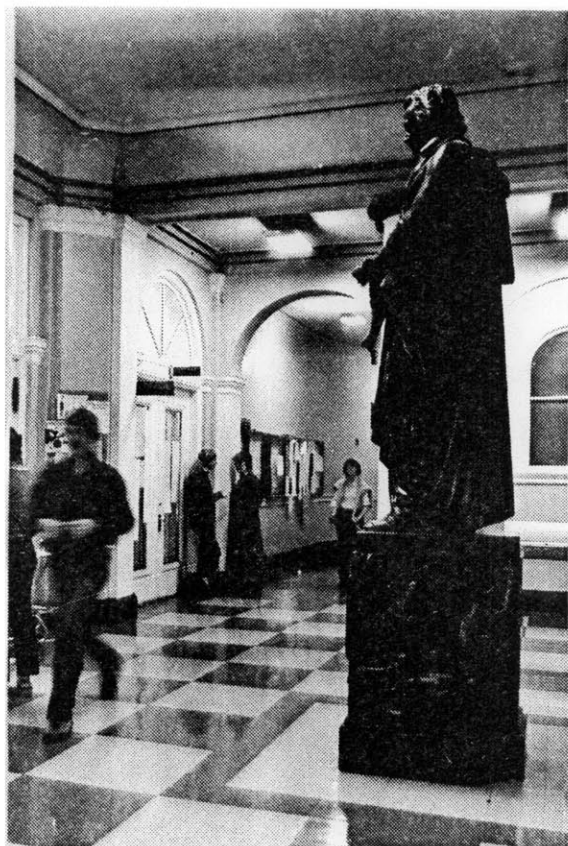


grand piano and a few chairs. In view of this short-cycle nature of the faculty's physical presence in the building, and the severe limitations on the available space within the existing building, a majority of the faculty have no home base to speak of. Faculty have expressed a desire for such space frequently enough to impell the administration to contemplate allocating part of the property to be acquired as faculty offices or lounges. A place for academic and casual exchange of thoughts and opinions among faculty should be considered an integral part of a specialized educational institution such as the New England Conservatory. A typical student's life in this building is somewhat similar to that of the faculty member. The student comes into the building for instruction and leaves immediately after it. However, in reality, students tend to show up earlier for their scheduled

17



instruction and stay after, in between instructions, walking around the building, checking to see who is practicing in Jordan, Williams or Brown Hall, checking the scattered bulletin boards for announcements or sitting on benches provided outside studios along the corridor. These benches are essentially the sole lounging area where conversation and exchange of greetings, information, etc. can occur. It should be possible to draw together facilities for causal lounging, information, and display features to provide some adequate sense of place and belonging for the students as well as administrators and faculty members. As the Conservatory is largely a commuter school by virtue of insufficient dormitory facilities, coming in for studio work requires a certain amount of time and space in adjusting to or recovering from the transition between inside and outside.

✓ 9
4

19

20





21

It is unrealistic to expect the student to come in from the severe winter weather of this region, and immediately proceed to sit down with his instrument and play with any technical dexterity. The act of lounging and socializing should be perceived as an integral part of the Conservatory's activities. There are, additionally, many possible ways to enhance the experience of being at school. Such additions as a refreshment stand and the revival of the music store would serve this end and also generate additional income for the school's daily operation. The student mailboxes, presently located in the basement, may be a potential place of casual gathering where students can exchange information, socialize, etc.

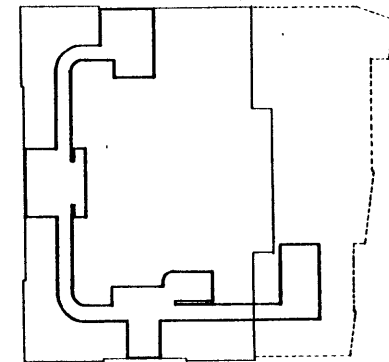
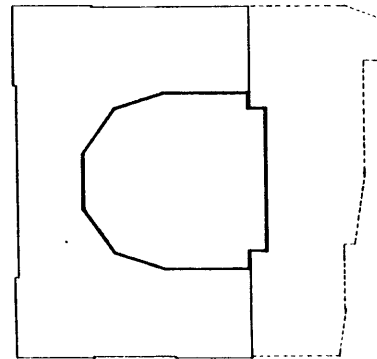
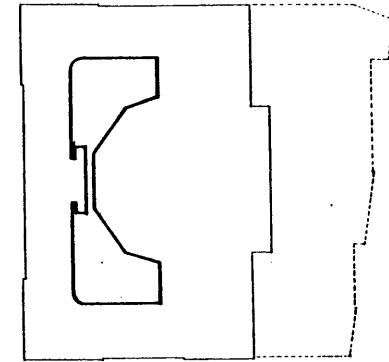
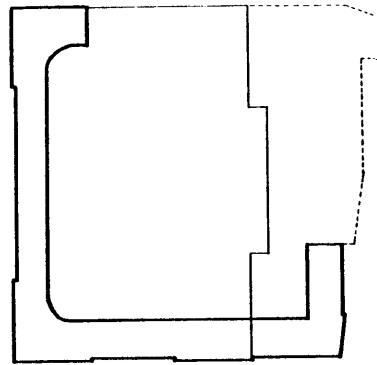
Regarding the overall building form, the existing Conservatory building represents a resolution of urban and internal concerns. Jordan Hall is an internally

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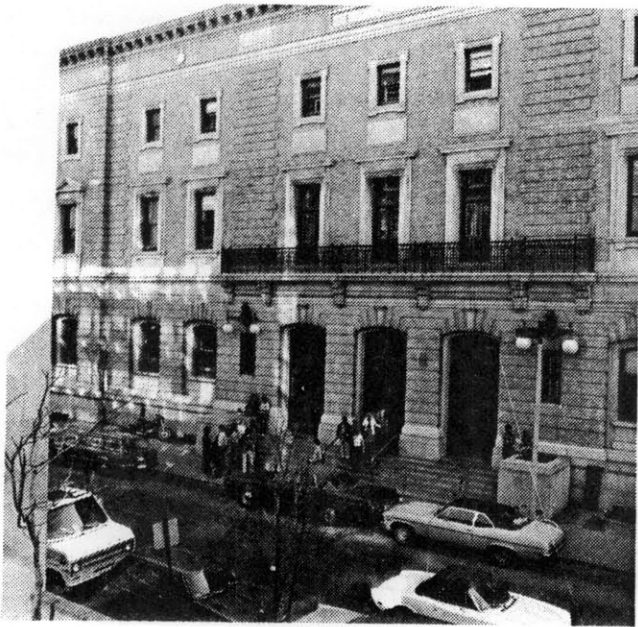


originated form, representing the consequence of obtaining a preferred seating arrangement which satisfies the goals of providing visual access to the stage and as well as a cross-audience view in a semi-round form. On the other hand, the periphery of the building is a direct response to the normal expectation of a block-like urban building articulated in a clear rectilinear discipline. The peripheral zone is occupied by enclosed rooms of consistent scale and is characterized by a repetitive rhythm in fenestration and access pattern internally. As the semi-round form of Jordan Hall is superimposed to occupy the middle of the street-originated rectilinear arrangement of rooms, a certain amount and shape of residual volume has resulted between the two forms. This residual volume is retrieved by carving into it to create internal support facilities and restrooms and staircases. The

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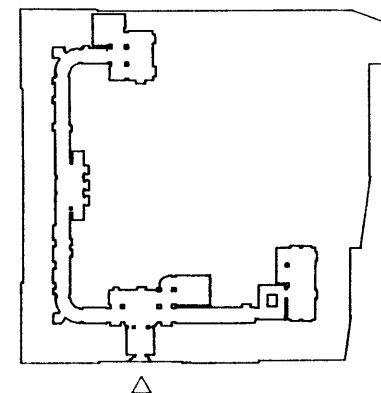
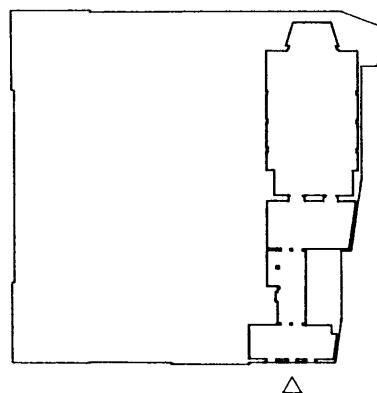
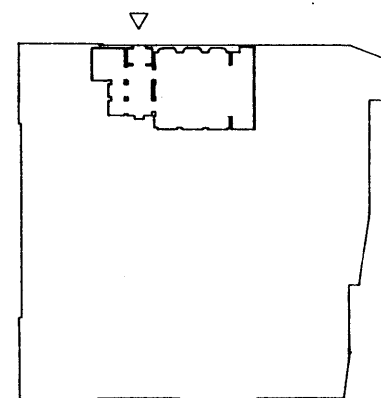
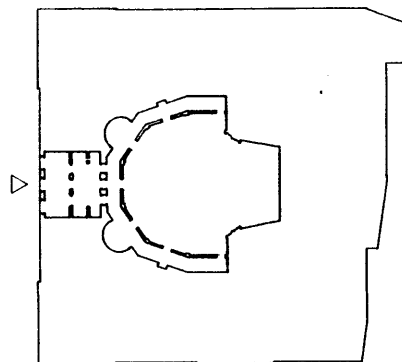
24



three distinct forms, one originated from a center, one from a set of urban edges, and the last generated subtractively by carving into the residual volume, provide an ordered layering of spaces. The Conservatory's main entrance on Gainsborough Street assumes a certain sense of enclosure due to build-up on the street around it. This serves as the first step in the transition from busy external Huntington Avenue to the internal activities of the school. By possessing built facilities on both sides of the street and aligning their entrance approximately on axis, the Conservatory has casually and inconspicuously claimed the street itself as a part of its identity.

Some lessons of substance can be learned from the manner in which circulation occurs within the existing Conservatory building. As a consequence of setting up an elaborate spatial layering into Jordan Hall as an

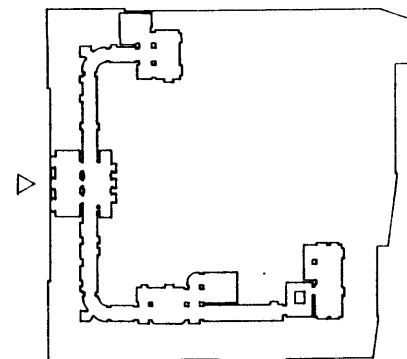
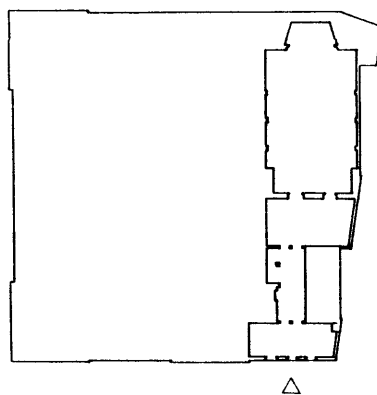
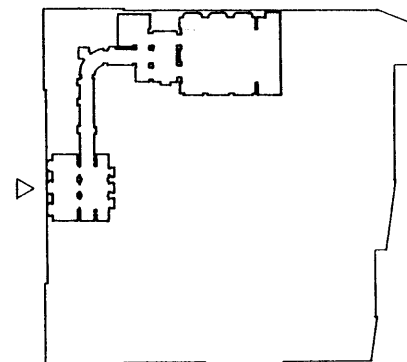
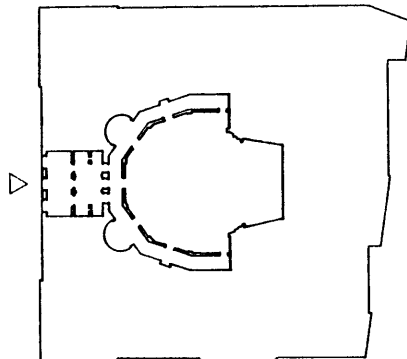
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environment of ceremonial procession, and of occupying the whole periphery of the block with rooms to contain the daily school activity, a crossing of two distinct spatial continuities occur at the main (and presently the only) entrance to the building.

The circulation patterns originally intended by the building design and those presently in use are outlined in the accompanying diagrams. The original plan provided for one entrance for each of four independent activities: events in Jordan Hall; those in Williams; those in Brown Hall; and the daily school activity. To each of the three performance spaces, fairly direct access is provided with levels of articulation corresponding to the character of likely events within. Brown Hall is placed toward the back of the expanded portion of the building in order to utilize all of the ground floor

B



space available in conjunction with the main school circulation. This results in a few offices placed along the path from entrance to the hall itself. Thus the access to these offices, which form the extension of the school circulation into the expansion, cross the entry procession into Brown Hall.

A similar but more extensive crossing of circulation paths occur at the main entry, associated with Jordan Hall, the principal public space of the building. Although this is a critical area in the building, little resolution to this crossing of circulation pattern is made at present. In the original plan, the pressure of conflict of two independent intensities and directions of movement is alleviated by the Huntington Avenue entrance intended principally for school activity. Security considerations led to the existing provision which limits building access





28



to a single point at the Gainsborough Street entrance, except when an event occurs in Brown Hall. The present arrangement compounds the problem of cross-circulation by necessitating the use of main entrance and a part of the school circulation to access Williams Hall. This situation seems to be tolerated only because Williams Hall is a small recital hall used primarily for presentation of student works. Such use integrates this hall more actively into the daily activities of the school. Additionally, the fact that Williams Hall is at the extremity of the school circulation helps provide a sense of independence from it. It is possible to bypass the front lobby of Williams Hall by turning among the columns to take the stairs up or down. The columns form an effective, if somewhat crude, visual zoning device.

Pertaining especially to Jordan Hall activities, and also to some extent to those in Brown Hall, there is a severe lack of lounging spaces where one could stand or sit during intermission and quietly converse, or where one could escape the heat of the packed performance space and catch a breath of fresh air. While the combined area of the spaces associated with Jordan Hall is quite large, most are at a circulation width conveying their purpose to the visitor singularly as that of circulation. Also, the corridor surrounding the hall, angled in plan and sloped in section, provides no sense of stationary place. Because the visual field is severely limited by the constantly curving plan shape, the corridor space feels very insignificant and not much lounging occurs in this area. During intermissions at a performance, severe crowding develops in the areas by the

restrooms and the front entrance which are the only spaces attaining a room size. A few patrons venture out of the specifically designated domain of concert activity, spilling into the school corridor and exploring various announcement and bulletin boards. Having done this, it is possible to lose one's way back into the auditorium. Critical links into the school proper are guarded by ushers, but the labyrinthian nature of spatial assemblage makes it always possible to sneak out of the confines and surprise an usher or two from behind.

III. PRELIMINARY STUDIES

62

3. PRELIMINARY STUDIES

3.0 List of Figures

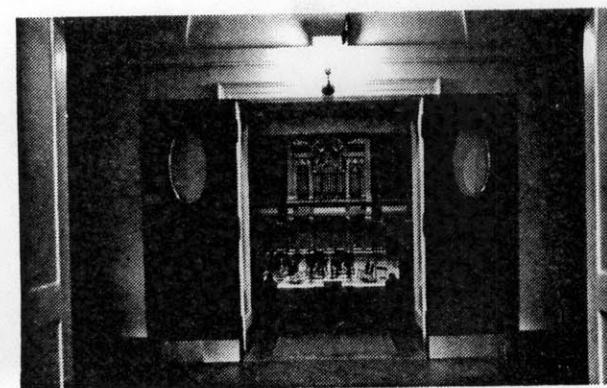
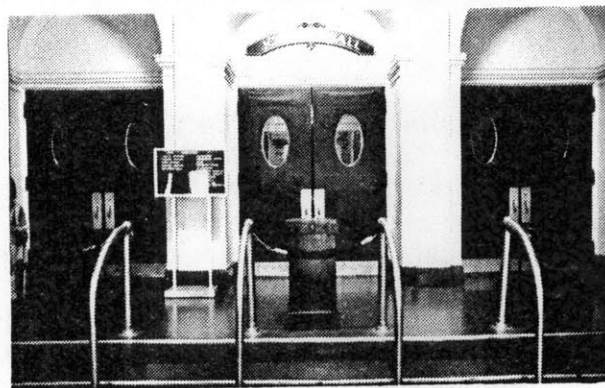
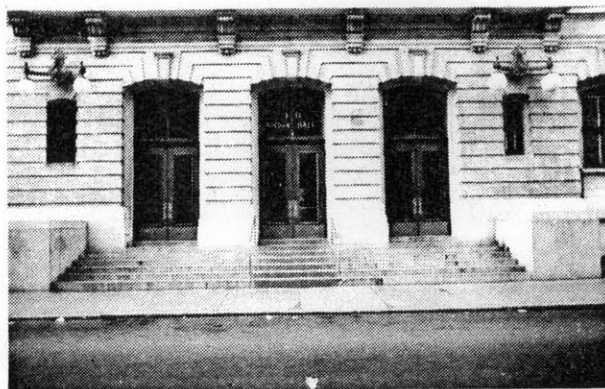
1. Photographs following the sequence of surfaces toward Jordan Hall.
2. Diagrams of spatial layering.
3. Diagrams of spatial layering.
4. Exterior view of Kresge Auditorium, Massachusetts Institute of Technology.
5. Section, Kresge. Saarinen: Eero Saarinen on his work, page 40.
6. Interior view of Kresge lobby. Higher portions of the Auditorium form the protruding volume overhead.
7. The entrance to the Little Theatre at Kresge in direct contact with a major turnaround in circulation pattern.
8. Memorial Hall, Harvard University. Entry vestibule to Sanders Theatre is articulated as a transitional zone.
9. Zone of entry from inside Sanders Theatre. Seating configuration and columns provide definition.

10. Symphony Hall, Boston. Plan. A Monograph of the Work of McKim, Mead and White 1879-1915.
11. Exterior view of Symphony Hall.
12. Juilliard School of Music, New York City. Plans. Architectural Record, volume 1, number 1, January 1970.
13. Section. ibid.
14. Diagram of layout at Juilliard.
15. Comparative diagrams of Juilliard and New England Conservatory spatial layout.
16. Music Building, Amherst College, lower level plan. Architectural Record, January 1969.
17. Ground level plan. ibid.
18. Upper level plan. ibid.
19. Section. ibid.
20. Music Centre Vredenburg, Utrecht, plan. A & U, April 1980, number 115.
21. Music Centre Vredenburg, Utrecht, plan. A & U, April 1980, number 115.

23. View of lobby space. ibid.
24. View of lobby space. ibid.
25. Abraham Goodman House, plan. A & U, February 1980, number 113.
26. Abraham Goodman House, plan. A & U, February 1980, number 113.
27. Section. ibid.
28. View, Goodman House lobby. Hebrew Reading Room to right and Recital Hall to left. ibid.
29. View. ibid.

3.1 The Sequential Order

The preceding examination of the existing physical facility at the New England Conservatory reveals that the design of this type of building, which accommodates ceremonial and special activities together with daily, ongoing activities, benefits greatly from an understanding of the interactions among various activities and the spaces allocated for each. The physical volume in which a performance or similar event occurs must have a high degree of enclosure, to appreciate the event in progress with all of one's senses. One view of such an experience is that it is a form of immersion in a make-believe world of fantasy. Consistent with this view is the typical insistence by theatre managers, performing professionals, and many others concerned, that the performance volume be totally isolated from any form of



exterior influence which might distract the audience's attention.

It is this value that the sequential experience of approaching a performance space addresses. The New England Conservatory is no exception in this regard, and provides an exemplary case of elaborate articulation, starting from the turn off busy Huntington Avenue onto the smaller street, essentially internalized as part of the Conservatory, then going up the steps, into the foyer, more steps and a threshold leading into the darker layer of space surrounding Jordan Hall and finally through the doors into the auditorium. The act of visiting Jordan Hall is structured into a sequence of discrete layers of spaces. In terms of practical building organization, the sequential experience through these layers represents penetration across the peripheral school functions to get

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to the internal volume. It appears then, that the elaborate steps to isolate the performance volume from noises and distraction of the exterior carry with it an opportunity to effect a certain spatial form. And it is in this sequence between the outside and the heart of the building, as it were, represented by the large public assembly volume, that the opportunity to see interactions among different activities exists. It is in this area, also, where much of organizational conflicts occur that call for formal resolution. The notable case in point is the crossing of the school circulation transversely across the axial orientation of the procession into Jordan Hall.

The main effort of this study, then, should be concentrated on understanding the nature, potentials and problems of the distributional spaces. The physical state of the distributional spaces inform visitors or

occupants as to the extent of their domain in a built environment. And through varying degrees of enclosures which define the distributional spaces, that domain can expand or contract, and associate or dissociate with sub-spaces around it. The content of this preliminary phase of study which precedes the design exercise, will examine possible approaches in designing the type of building in discussion through observing existing buildings and designs, including the New England Conservatory, which exemplify the building type where public assembly coexists with, or is superimposed on, another set of activities occurring on a daily basis. Additionally, certain isolated aspects of public gathering facilities in general that are relevant to this study are incorporated here, with mention of examples where applicable. These examples, both of public gathering facilities in general

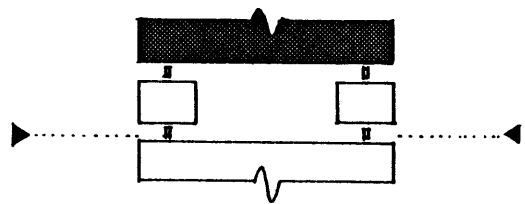
and of buildings that relate more closely to the scope of this study, were chosen on the basis of accessibility, availability of graphic information, etc. It is not the purpose of this section of the study to search for and report the most noteworthy past designs of relevance, but to provide a survey of the spatial organizations and possible qualities that the building type in discussion may possess. In this regard, almost any public gathering building promises offerings, taken together with a number of other buildings, that may inform the search in progress.⁽⁶⁾

The sequential experience of moving toward the place of public gathering, as discussed earlier, forms an important part of the act of visiting a gathering event. It appears worthwhile to examine the ways in which various subdivisions of spaces are organized to yield the

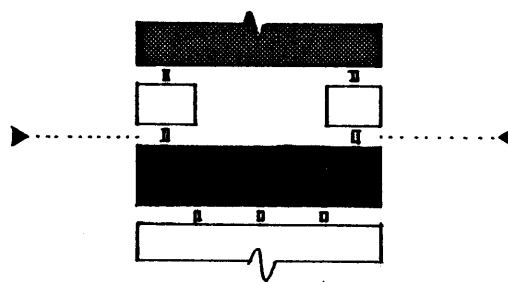
experience of *procession* as well as serving functions of control and transition. Some of the sub-spaces that may occur between the outside and the final destination, the assembly space, are: entrance foyer; ticket booths; main lobby; lounging spaces; and foyer into the assembly volume. A diagrammatic outline of these spaces and their combined effects is made below, with accompanying illustrations.

The simplest form of such a spatial sequence that can be imagined would consist of the outside, a threshold to mark and control entry (ticket collection), and the assembly volume (diagram a).

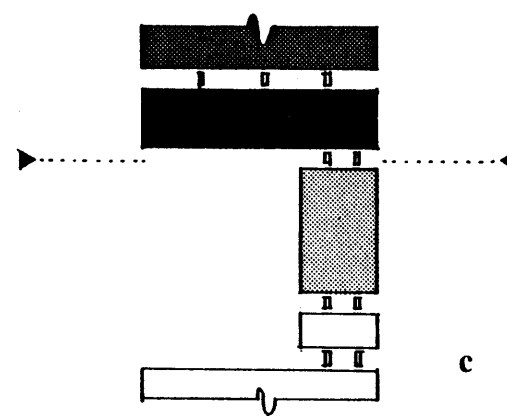
With a larger audience, need arises for enclosed space outside the threshold, as individual members of the audience may take some time and space before being admitted into the assembly volume or later during



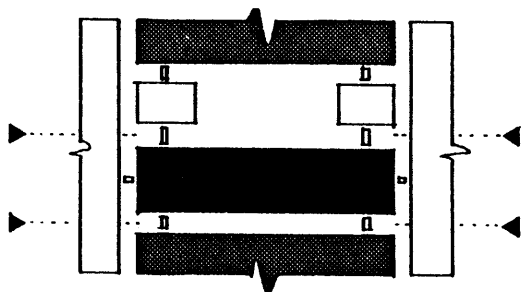
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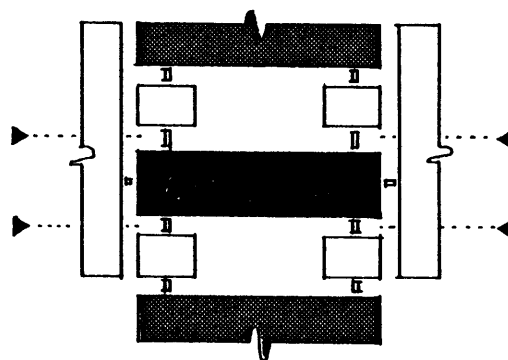
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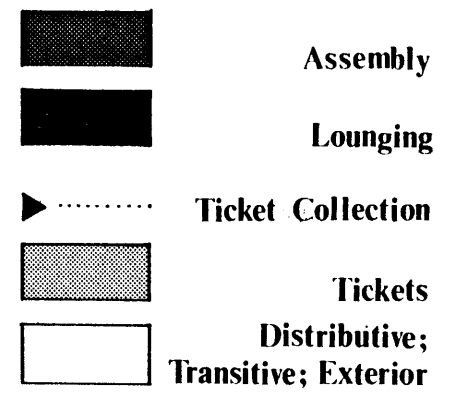
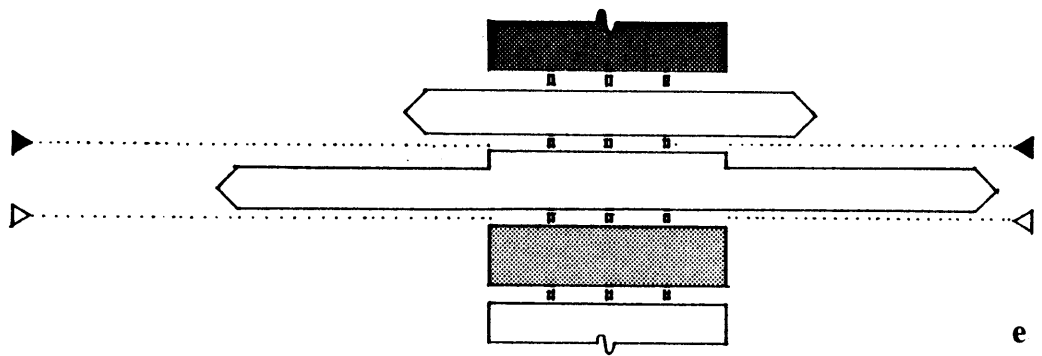
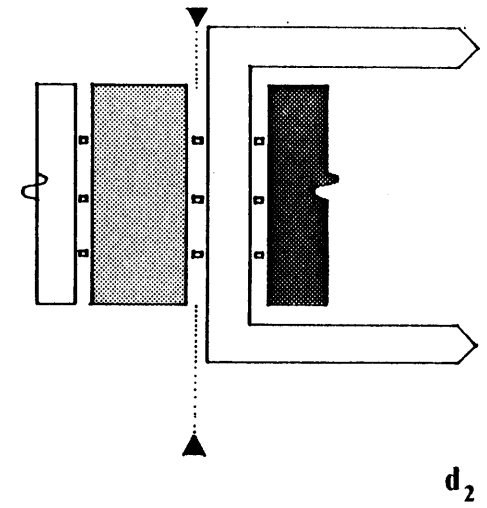
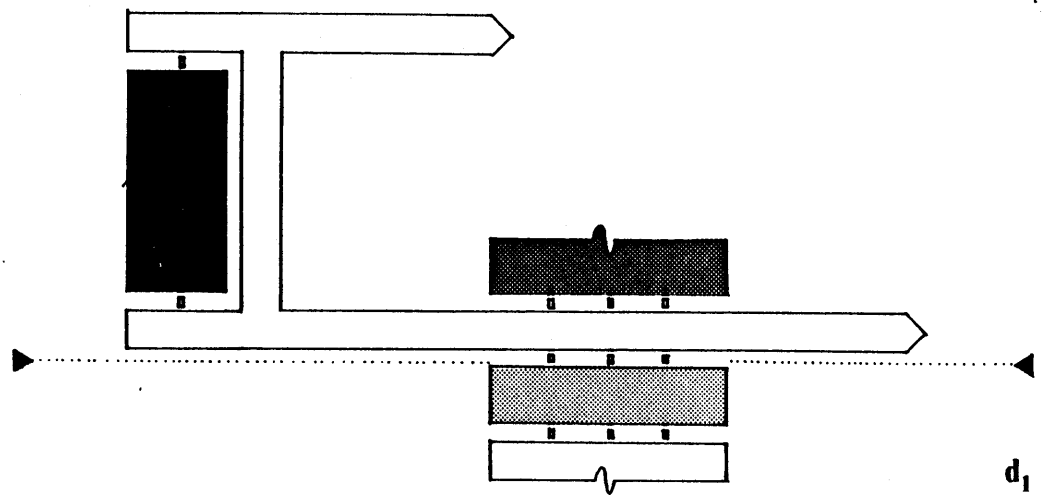
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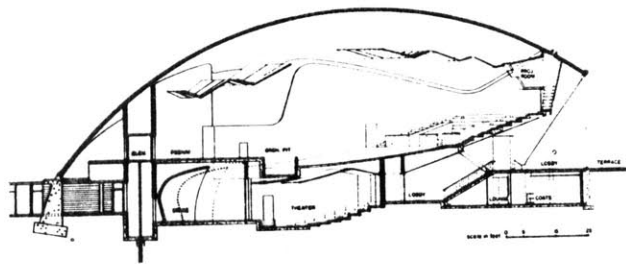
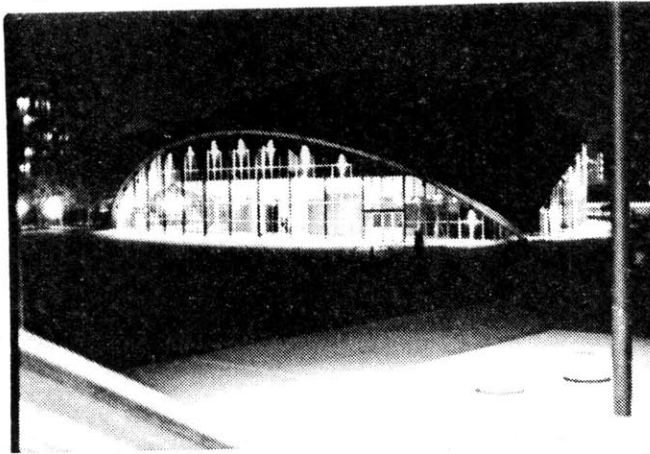


b₂



b₃



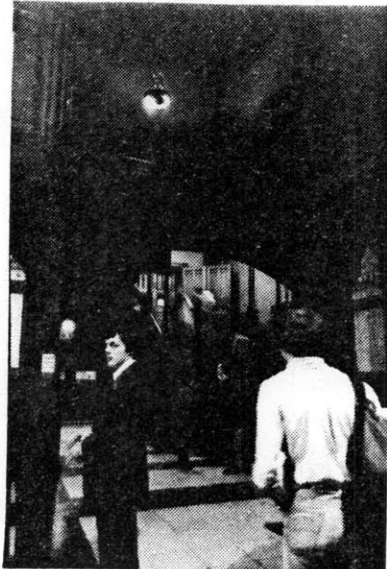
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intermission. This kind of space is necessary for a large number of people taking out tickets to present to the usher, taking off coats, and general preparation of the mind to enter the assembly volume. During intermission, such activities as refreshing oneself, having a place to converse with companions, and a general change of pace, are all necessary and desirable. This simple progression of outside - principal lounging - control point - assembly volume occurs in many gathering places that accommodate sizable audiences in a predominantly casual mode as in the Kresge Auditorium at Massachusetts Institute of Technology and Memorial Hall at Harvard University (diagrams b_1 , b_2). The introduction of the principal lounging space enables the building to accommodate a multiple number of events simultaneously if necessary. At the Kresge Auditorium this is attempted by

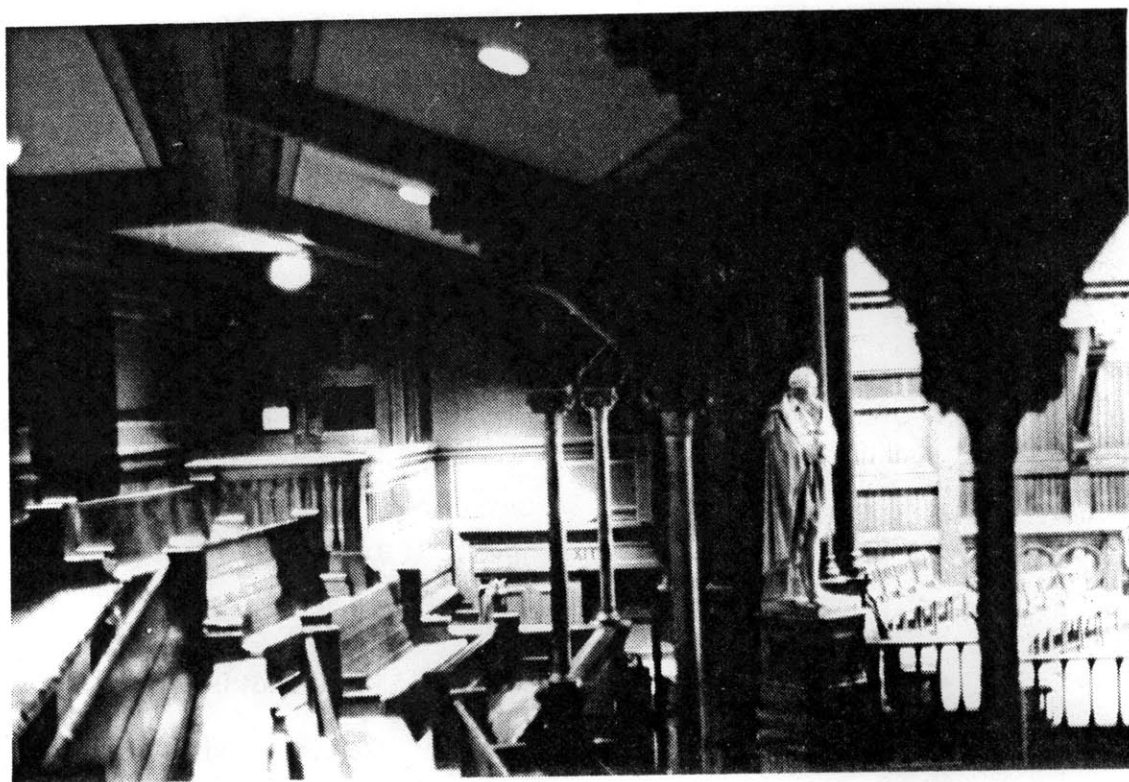
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placing a small theatre underneath the main auditorium but its use is limited because the audience in the large auditorium must pass by the front of the small auditorium to use restrooms and coatrooms making the latter vulnerable to physical and aural intrusions. The lobby space at the Memorial Hall also serves two gathering spaces. Here, a transitional layer between the lobby and the semi-round auditorium provides enough dimension to serve as a point of control. This buffer zone is useful in the case of simultaneous use of two assembly spaces, where one of the events may release people into the lobby (at the beginning, intermission, and end) while the other event might be in progress. The buffer zone reduces the chances of both aural and physical intrusion. Ideally, when a multiple of assembly volumes are served by a single lobby, a buffer zone should be articulated at

76
8

all points of entry (b_3). The manner in which the Kresge lobby relates itself to the outside contrasts significantly with that of the Memorial Hall. The Kresge lobby is not articulated as a space generating from within. Rather it is a casual inbetween resulting from the juxtaposition of the auditorium shape onto the flat plane of the outside. As such, no separation from the outside is afforded except by a layer of completely transparent glass. The characteristic advantage here is that the interior lighting of the lobby is seen directly from the outside, serving to announce the event inside to the visitors and passers-by. On the other hand, the Memorial Hall places its lobby in such a way as to provide minimal exposure to the outside approaching a more internalized volume, different yet consistent with the assembly volumes. In Memorial Hall, one does not risk



78

the danger of being abruptly pulled out of the total immersion in the ongoing event, when wandering out into the lobby during intermission.

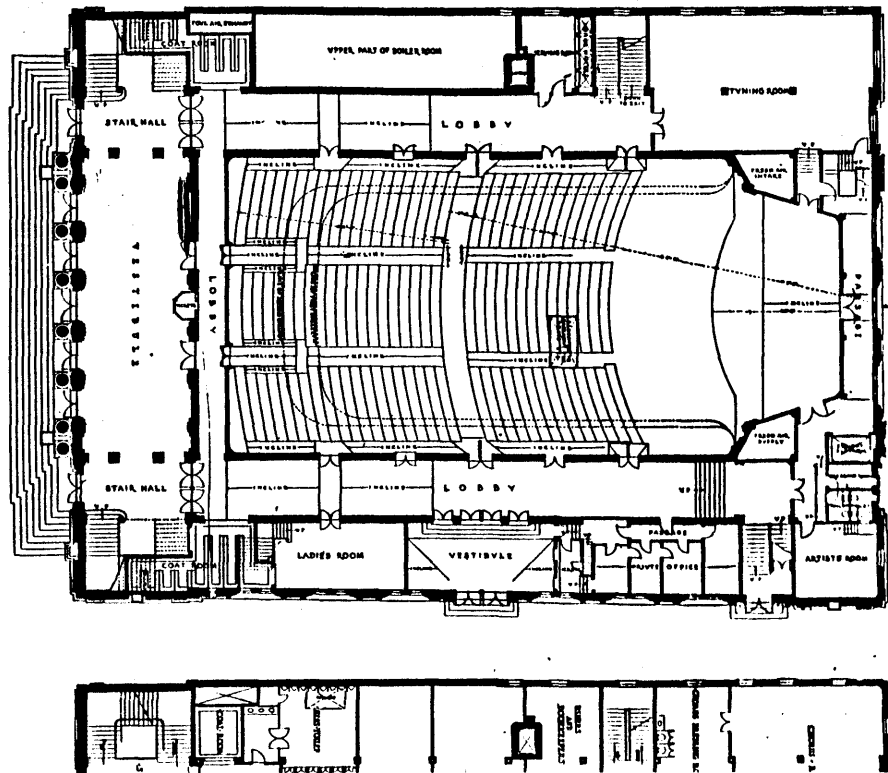
The preceding two buildings are owned and operated by educational institutions which frequently sponsor gathering events either free or for small fees. Reflecting this, their provisions for ticket selling are rather casual and transient. When tickets are required, one may purchase them beforehand, or purchase them in the hall at a booth set up in the lobby space. This requires no more than a table top, a person or two, and enough space for visitors to form a line to obtain tickets. The booths disappear afterwards as quickly as they were set up.

Provisions are more elaborate for a commercial establishment whose ticket sales are an important component

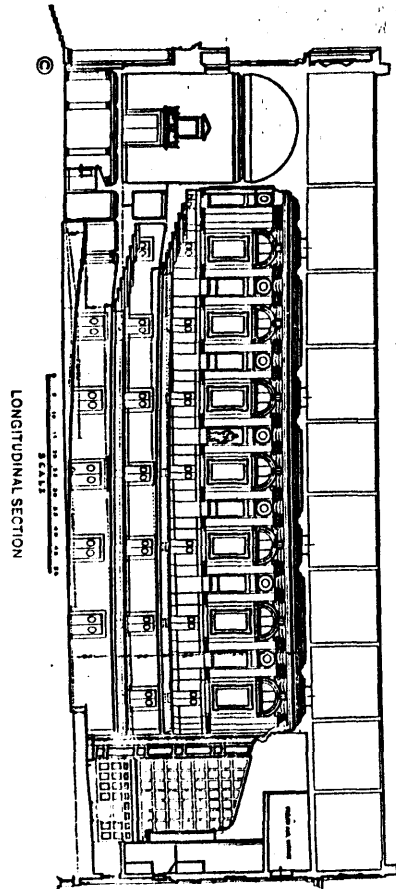
of sponsoring a gathering event. Diagram c is derived from the Colonial Theatre, Boston. The Colonial provides a large area for dispensing tickets. By virtue of its placement those seeking tickets ahead of time are provided with an introductory experience of the theatre proper. Beyond the ticket windows, the threshold doors separate the inner lobby and the theatre volume itself, but enables the ticket holder to anticipate the forthcoming experience of moving into the theatre. Once the event is about to begin, the frontal lobby allocated for ticket sale functions as a part of the processional sequence as well as a casual waiting place in front of the ticket-collection point. This space has the effect of elongating the transitional experience. The visitors are taken from the crude pavement of the city street through two layers of doors, into this front lobby which is articulated in hard

stone material with pictorial patterns. Patrons then pass through a set of doors at which tickets are collected and on into the inner lobby, with its red carpet, mirrors on walls, gold ornaments, etc., and continue into the richly ornamented theatre volume. Three staircases, one elaborately ornamented, and two intertwining each other in a quizzical pattern, lead to balconies. Provisions for refreshments are made everywhere: one for each of the three floor levels and one for the front lobby. The latter seems also to serve some use as an easily identified place for patrons to converge with their companions.

The extent of spatial layering becomes even greater where very large audiences are served, such as in Boston's Symphony Hall (diagram d_1). Because of the oblong geometry of the assembly space and the access pattern associated with it, the Symphony Hall requires a



GROUND FLOOR PLAN

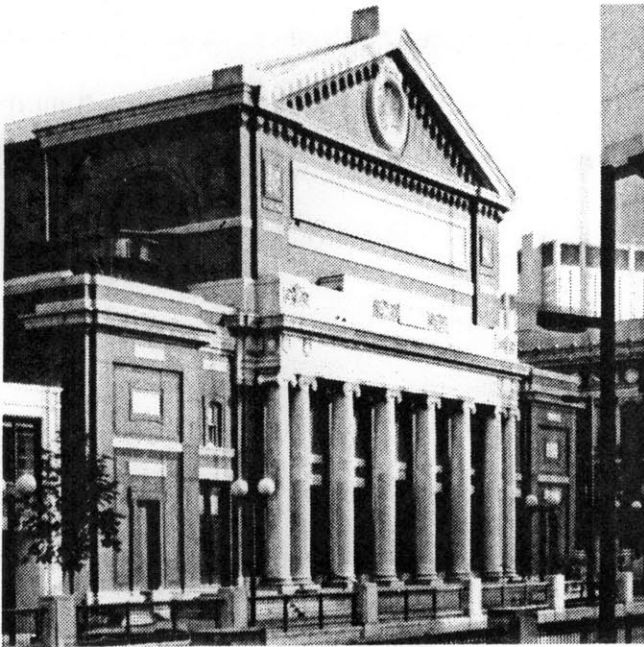


LONGITUDINAL SECTION

82

linear distribution beyond the threshold where tickets are collected. While the corridor thus formed is wide enough for people to stand around, converse, etc., there are two discrete lounging spaces provided at the rear of the assembly volume. This introduces an extra experience of traveling to and from a destination within the event to obtain refreshment and to lounge. At the beginning of the intermission people tend to be in the corridor area, meeting acquaintances as they come out of the assembly volume, wandering around, etc. They gravitate rather quickly into the lounging spaces to allow enough time to enjoy the refreshments and various art or music exhibits provided (the success of these exhibits has led the management to expand the displays to the corridor area as well). The frontally oriented facade of Symphony Hall on Huntington Avenue suggests that an alternative

11



layout of spaces existed in the original building plan, but that alternative (something like diagram d_2) would have placed some limitations on the sense of different places that the hall could hold within its present form of side-entry arrangement. Some additional amenities at the Symphony Hall include clear yet well-controlled access to the performers' and conductors' lounges, which some of the audience may visit to greet and thank the performers after the concert, and a long exterior wall space on which information on future concerts can be found while passing by the Symphony.

Returning to the New England Conservatory, we see that the diagrammatic layering of spaces resemble that of the Symphony Hall (diagram e). An additional layer results from the need to accommodate the school circulation while keeping the assembly volume and its peripheral

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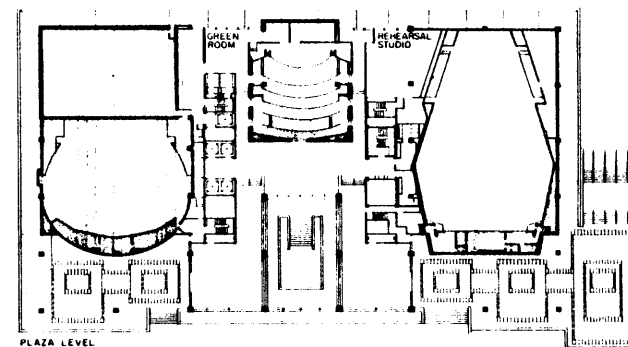
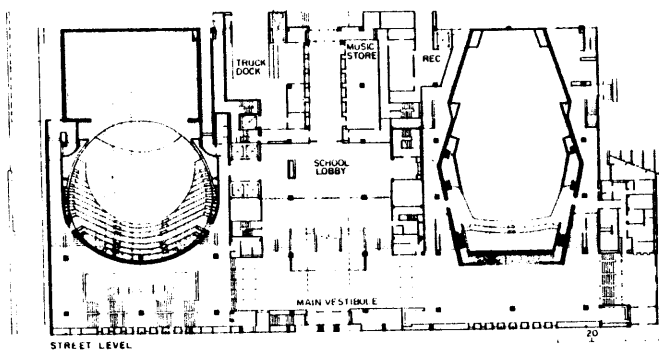
corridor undisturbed. Here a number of vertical surfaces must be penetrated in a very short interval, too short for the experience to be fully appreciated. And the peripheral corridor around the assembly volume is low, narrow and dark, overwhelming the positive aspects of surprise that this space potentially possesses due to its constant curvature and sloping floor. The elaborate layering of spaces within, already very narrow in dimension, has resulted in lack of a place where casual standing and conversing can occur without getting in the way of circulation.

3.2 Manners of Interaction

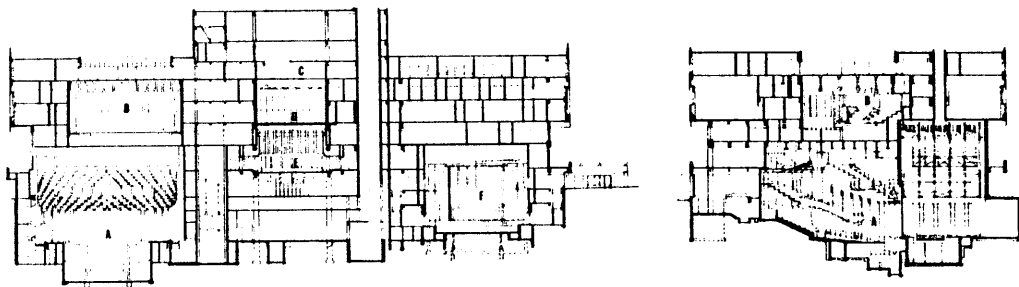
Having examined briefly the aspects of spatial layering directed toward the experience of moving toward the assembly volume, a coverage of a second major component in this building type is due. This is the

interaction of circulation serving the routine activities with that serving the public gathering spaces. While in this regard the existing New England Conservatory building represents a rather unclear organization in which junctures of spatial continuities are accommodated awkwardly, other examples may serve to clarify some approaches in resolving those junctures. For this purpose a pair of buildings, the Juilliard School of Music in New York City, and the Music Building at Amherst College, Amherst, Massachusetts, are examined here. These two buildings present a contrast in approach or attitude toward the issues of spatial juncture.

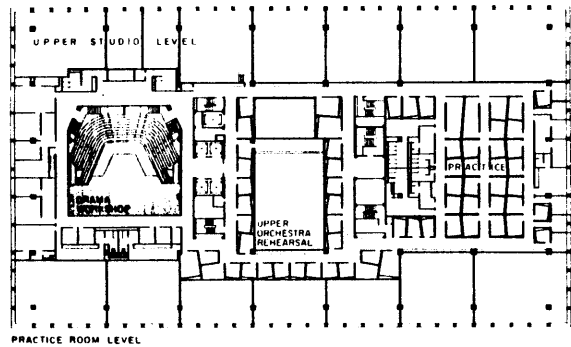
The Juilliard School of Music is a well-established and highly regarded postsecondary educational institution in music. Its building, of fairly recent construction occupying part of Lincoln Center in New York City, is

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- A. Bulfinch Theater
 B. Drama Workshop
 C. Ulla Acheson Wallace Library
 D. Orchestra rehearsal and recording studio
 E. Paul Reital Hall
 F. Alice Tully Hall



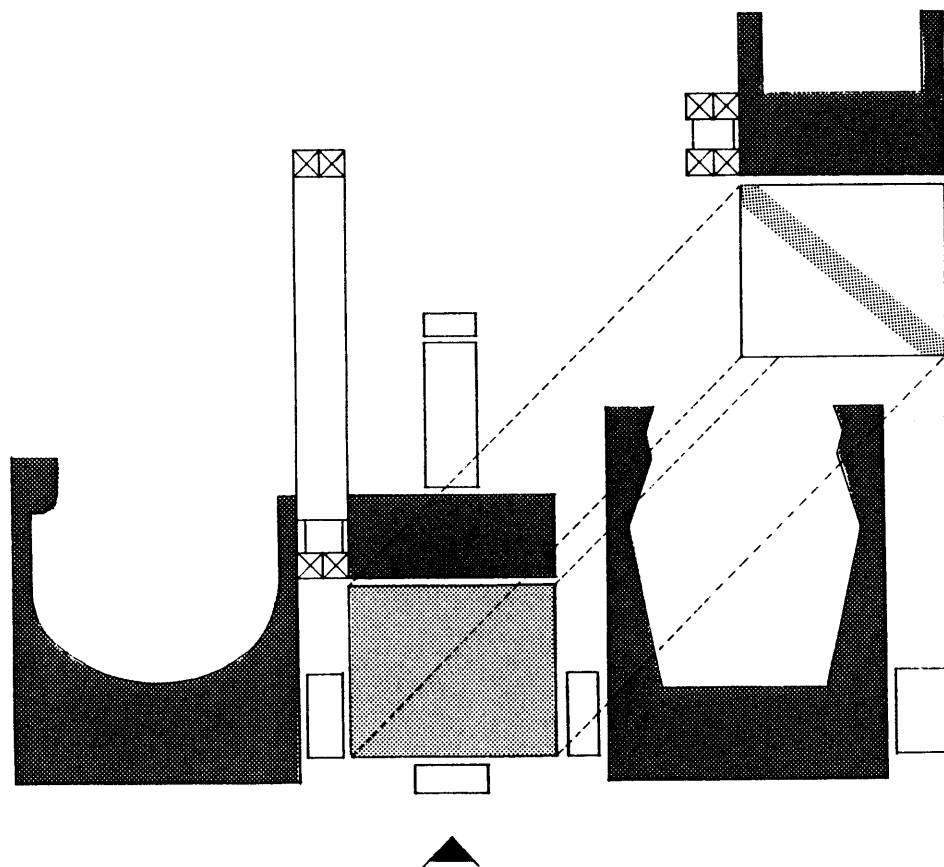
13



often looked upon by music educators as a desirable way to house their activities. The physical facilities are fairly new and provide ample space and facilities for students, faculty and administrators. Altogether, four assembly volumes are housed within the Juilliard building together with numerous studios of various sizes, a large library, cafeteria, lounges, music store, and so on. The assembly volumes are: (1) Alice Tully Hall with over 1,000 seats; (2) the Juilliard Theatre with approximately 1,000 seats; (3) Michael Paul Recital Hall with approximately 280 seats; and (4) the Drama Theatre with approximately 206 seats. Tully Hall, on the ground level, is owned and operated by Lincoln Center. The Juilliard Theatre, also on the ground level, is the largest assembly space owned and operated by the school itself. The Paul Hall and the Drama Theatre are situated above

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ground level, somewhat deeper into the building's daily activity zones.

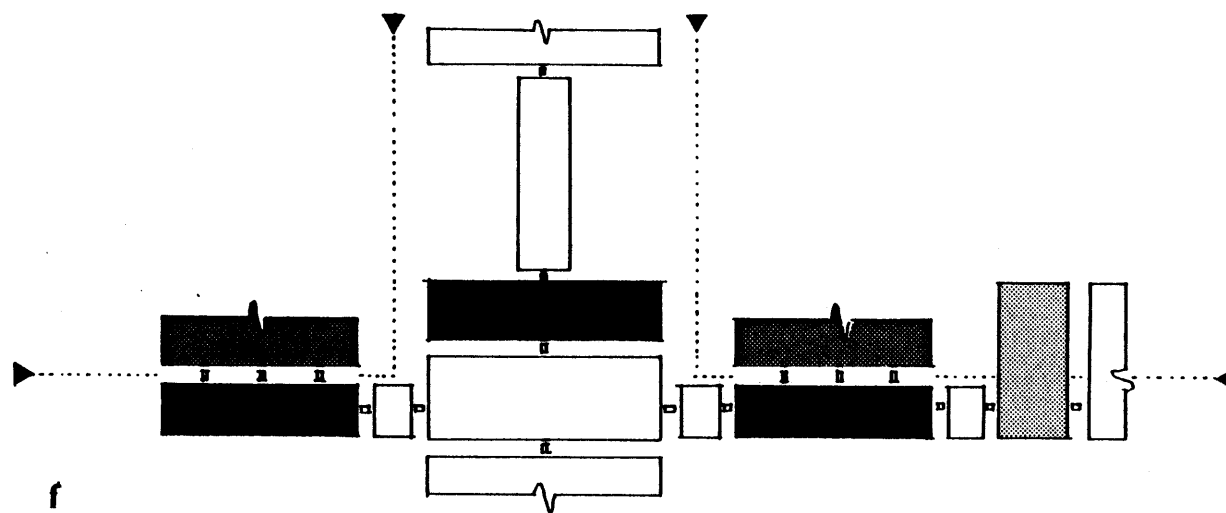
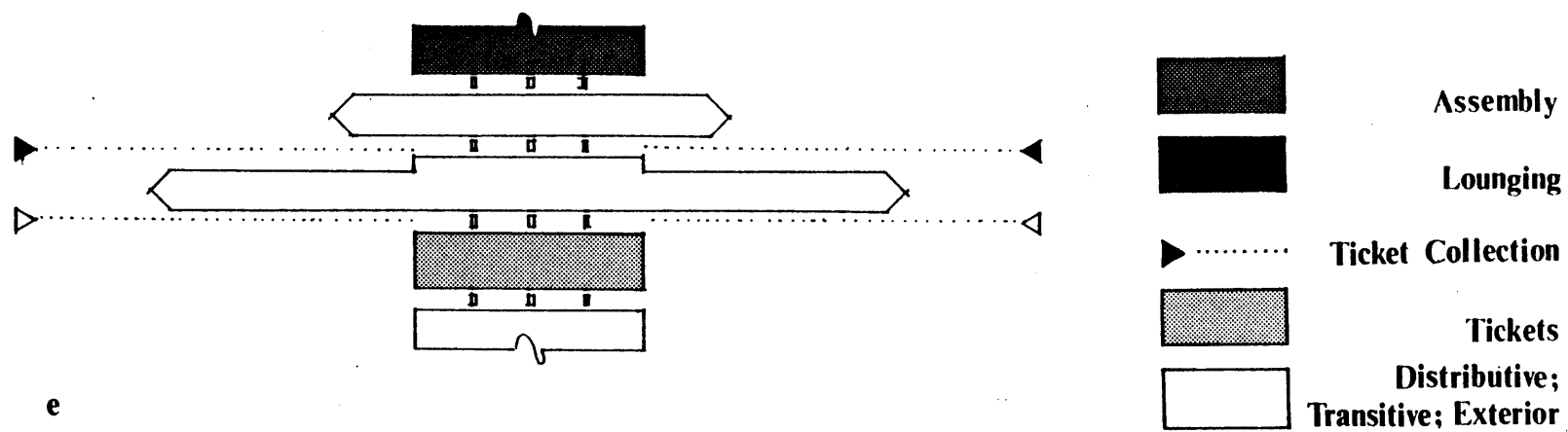
As seen in the accompanying diagram and plans, the manner in which all of the activities in this building coexist is essentially through careful buffering and isolation, making each activity autonomous and independent. Tully Hall, which must be most detachable from the rest of the building because of management arrangement and the more public nature of events housed within, has an independent main entry facing Broadway. The Tully Hall can also be accessed via one end of the school's vestibule which faces Lincoln Center, but this connection is seen as secondary to the Broadway entrance.

The main vestibule of the Juilliard School is a large glass-enclosed volume with a huge stairway in the center. This vestibule constitutes the main distributional node

97

serving as a key to the organization of the entire building. From here one may enter the lobby of the Juilliard Theatre, or take the middle staircase up to the recital hall which has its own lobby beyond the upper stair landing and a wall of transparent glass. From ground level, one may also move past the staircase deeper into the building, and arrive in a totally internal main school lobby. This lobby, placed at the geometrical center of the building plan, is only the beginning point of the school proper which must be accessed by four elevators placed beyond the guards' desk. Alternatively, one can continue in the direction from the Lincoln Center side, through the main vestibule, through the school lobby and get out to a very wide corridor whose only function is to provide access to the music store, service areas, and the back side of the building. This configuration

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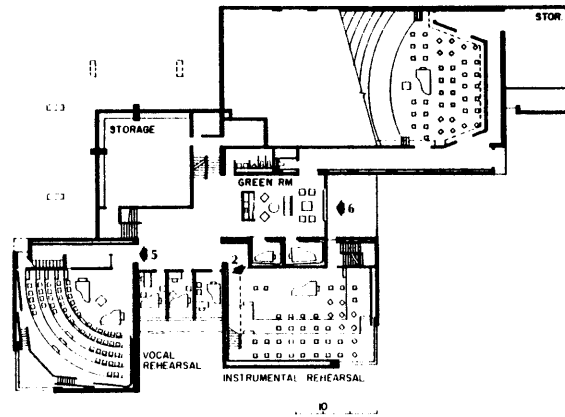
thus enables complete piercing through of the block across the middle of the building from the Lincoln Center side to the back.

This highly disciplined exercise in sub-dividing the interior areas into a series of lobbies enables total separation of the functions within. Because of the main vestibule which acts as an all-purpose spatial divider, any number of events, up to the full capacity of the building can occur without spatial and aural conflict. At the same time, this approach toward multi-use of a single building, inadvertently creates an either/or situation in which a given space (in particular, a given lobby) is alive and full of activity when there is an event in progress, and it is totally unpopulated and unused behind a locked impenetrable plane of glass when there is no activity within the associated assembly volume. All

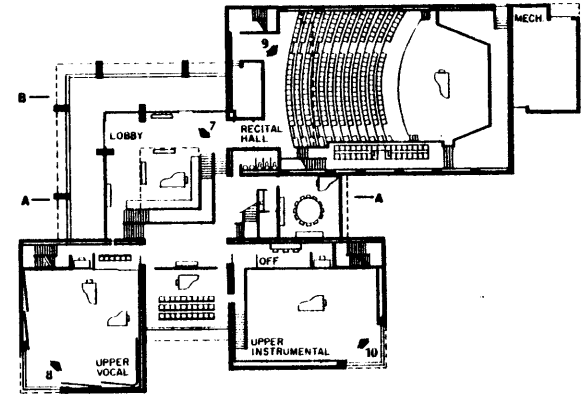
of the daily activities are completely concealed from the ground level and are virtually unreachable without the assistance of prominent signs or a receptionist. Anything that might embody the activity buried deeply within is overwhelmed by the rigid symmetrical order of transition planes and the vast expanse of spaces divorced from sources of natural light. The building will function as intended when there is a full load of activities, but with anything less one is likely to sense more dead spaces than live ones.

An alternative approach is offered by the Music Building at Amherst College, Amherst, Massachusetts. Here, the school's location in a small town and the relatively small size and range of activities to be housed has enabled an alternative approach. Such an approach would probably not be readily adaptable to a large and

94



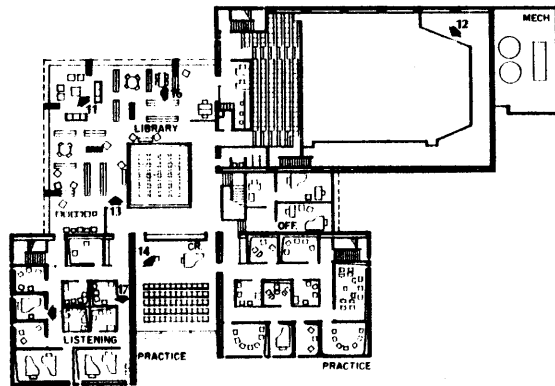
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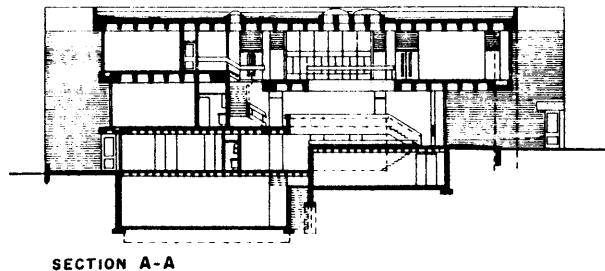
17 FIRST FLOOR

complex urban institution where strict standards of control must be maintained for security purposes.

The building accommodates a single assembly volume, a recital hall with approximately 450 seats, together with two large rehearsal rooms, classrooms, practice rooms, administration rooms, a lounge for performers, and a library. The three large spaces are contained in independent block-like enclosure of brick, and between them activities requiring more daylight, exposure, etc. fill in (see plans). On the ground level, the entry lobby occupies much of the open area, leading into the recital hall and rehearsal studios. Tickets for events in the hall are collected at the door leading into the brick-enclosed volume of the recital hall, thereby leaving the major portion of the lobby free for access by students using other facilities. While not a vast space, the lobby



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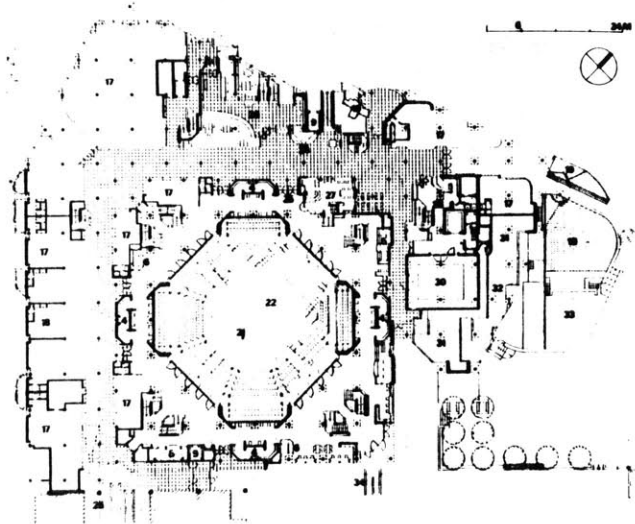


is adequately sized for entry transition, general and intermission lounging, and cross-circulation. A large skylight above the multi-story height provides comfortable daylight in this area. Above the lobby, and around the skylight, the library occupies a very prominent location, benefiting both from daylight along the periphery of the building, and the skylight. The location of the library provides a symbolic clue of the daily school activity to performance patrons. The library has longer hours than most other school functions making it likely to be open during concert hours, and the interior lighting of the library helps to illuminate the lobby volume. Through manipulation of circulation pattern and floor levels, the entry lobby can be read as either a central element for the whole building or a principal lounging space for the recital event forming an introductory layer of space.

3.3 The Lobby

An almost visionary outlook on people's positive engagement or involvement in a built environment for public gathering is realized in the recently completed Vredenburg Music Center, Utrecht, Holland. In this building, the lobby space greatly exceeds its traditional role as a supporting function for the act of assembly. The lounging becomes almost a self-purposed activity that has its own life and sometimes overwhelms the assembly volume itself. The architect of the building noted that since recording technology has enabled duplication of the live performance at home at affordable cost, the true significance in attending a live performance is no longer solely in the appreciation of the music alone, but also the participatory associations of being there. "...it is the communal emotional experience expressed in

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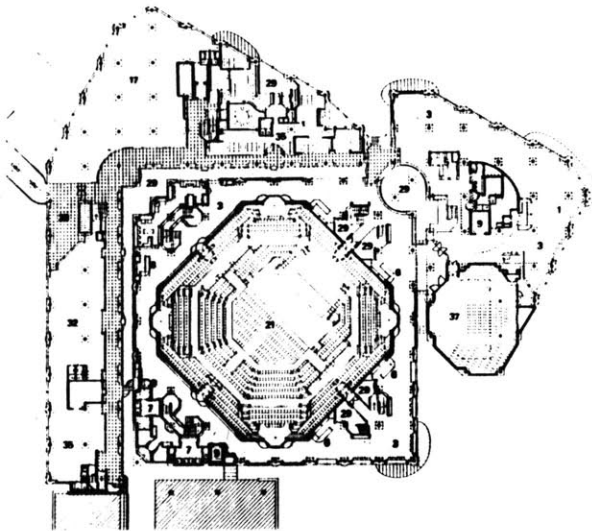


applause, for example, which makes going to a concert a unique experience."⁽⁷⁾ People's encounters with each other and an overall communal feeling comprise the generative force behind this design, featuring what amounts to a theatre in the round for approximately 1,700 seats and an extensive multi-level lobby depicted as a street, all around it. The building is situated so as to be intensely and intimately incorporated into the existing urban fabric, drawing people into and through it. Numerous entries into the lobby proper assure that wandering in and out is encouraged during a free concert. Furthermore, large swinging doors can be opened into the auditorium space so that music can be heard in the lobby area as well. Along the street-like portion, commercial rental spaces are provided to assure and reinforce the intensity of public activity. The building

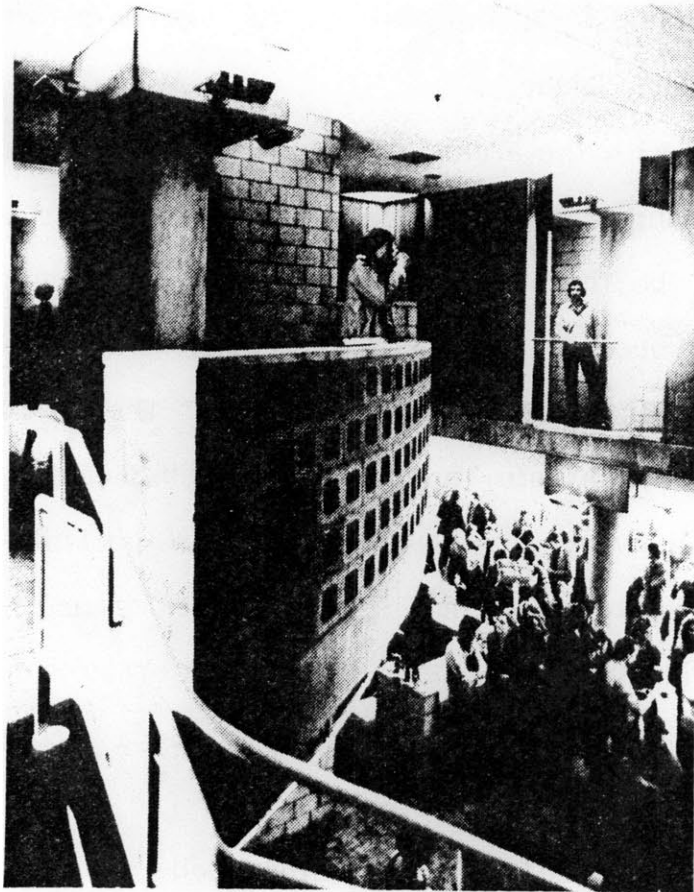
is filled with places to sit, walk, hang around, etc. Spaces are fragmented to suit a large number of small groups of people. Ten buffets can be found in the so-called foyer area alone.

Consistent with the architect's argument for concert-going as a communal, participatory experience, the lobby would, indeed, be the most important place in the whole building. He succeeds in injecting intensity and liveliness into it by introducing 'extras' such as the rental space and connection into the nearby shopping center, and fragmenting every possible element within the building into an assemblage of small pieces. Such fragmentation of building elements, as well as spaces, results in a kind of visual scintillation which seems to add a certain amount of life to the physical environment. The original aim for all this fragmentation was "to bring all the

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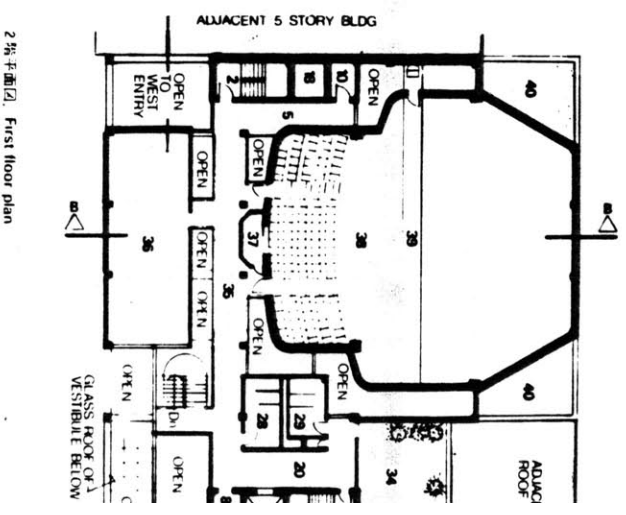


proportions down to the scale of a private house and to make the building suitable for a large number of people in the process: that is not by the use of large units, but by using large numbers of small units."⁽⁸⁾ This view of the act of assembly, likening it to the daily life, is somewhat controversial. Some may stress the very uniqueness of size, scale or vocabulary of the 'spectacles' of monumental quality as an important part of the experience in public gathering. In the Music Center at Utrecht, no allowance has been made to stress elements of surprise or encounter with the unfamiliar. Rather, the architect's concern rests with what he perceives as negative aspects of the monumental and its ideological associations, and ways to suppress it. In this kind of architecture, no room is allowed for a sense of amusement and of grandeur such as in the stairway at the Paris Opera.

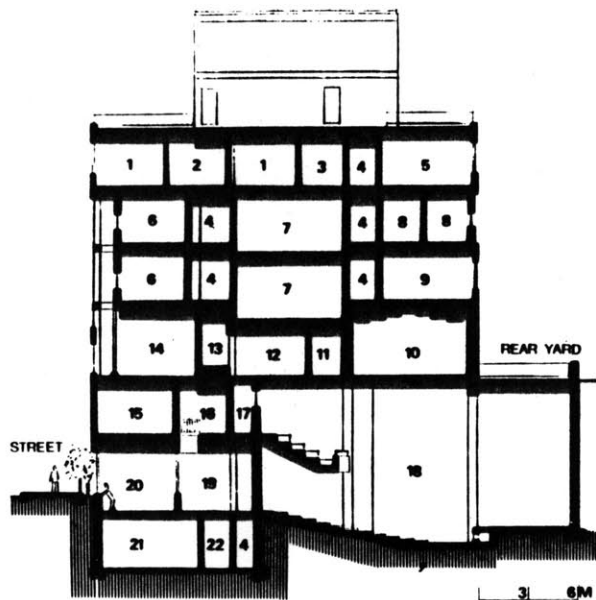
A sensible lesson from the Music Center at Utrecht seems to be that the lobby space can have a life of its own, enhanced by all imaginable activities of lounging--sitting, standing, looking out around, talking, eating and drinking, and so on. The Music Center can be seen as a limiting case of achievable intensity, both in terms of people's activities and visual fragmentation. Here, the high degree of fragmentation may actually result in a kind of uniform impression in the visual field or in the blurred understanding of the places or pieces within. Aspects of spaces are generalizable, and although each piece of space is unique and delightful, nothing seems to distinguish it from other similar spaces, thus not enabling people to identify various places within the large building on a short-time-visit basis.⁽⁹⁾

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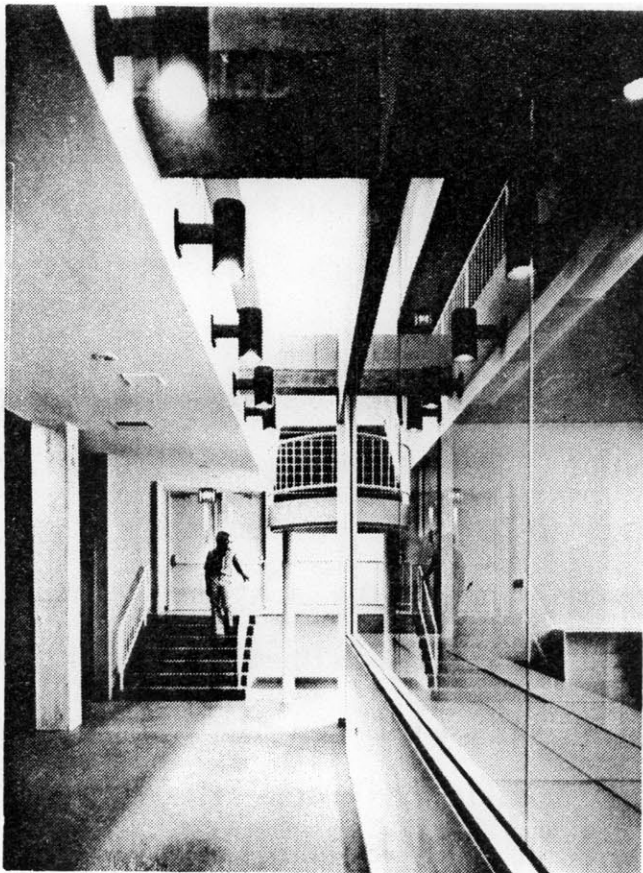
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A more modest example of design in scale and scope of the experience of the lobby space as an important part of the ongoing event is found in the design of the Abraham Goodman House in New York City. This small music school was recently built to house the Hebrew School of Music. The institution expressly demanded a good quality gathering space which can serve as an income-generating property.

While all of the daily activities are on the building's upper levels, limiting public exposure, there seem to have been efforts made to enhance the lobby of the recital hall with some clue of the activities upstairs. The lobby is an interior volume defined by the recital hall to the back and a glass-enclosed room, comparable in size to the lobby itself facing West 67th Street. The upper part of the lobby, feeding into the balcony, is

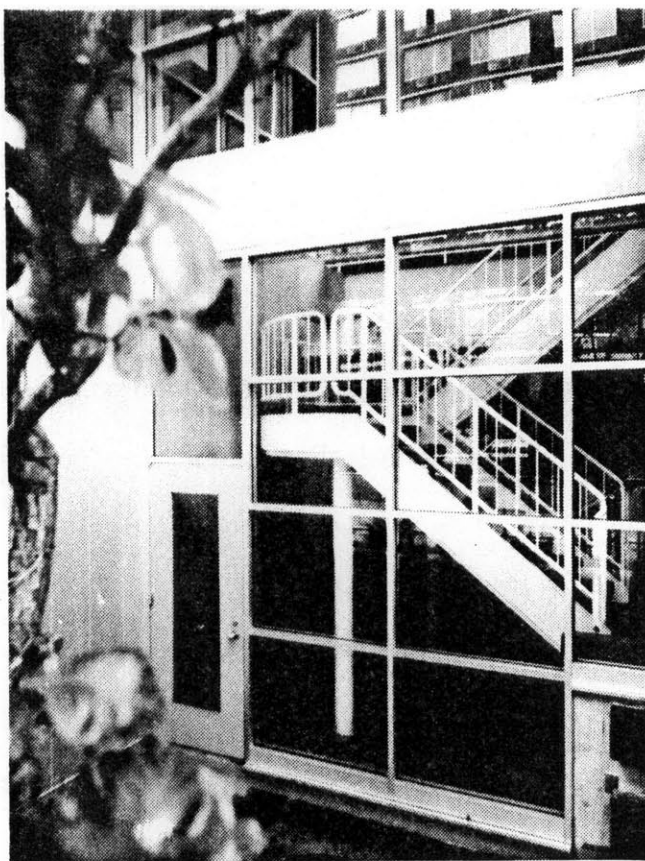
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simply a bridge that runs in the middle of the void above the ground level of the lobby. This level has another room in the corresponding location, size and proportion to the glass-enclosed volume below, this time covered with opaque walls except for the glazed wall toward the upper part of the lobby. Of these two large rooms adjacent to, and accessed only through, the lobby space, the lower is designated as a reading room for ethnic materials. From this room, both the streetscape and the lobby space, and the assembly volume beyond, are in one's view. Its direct visual exposure to the street should encourage members of this ethnic neighborhood to visit it often and use its facilities. When there is an event in the recital hall, access into this reading room, at least visual if not physical, should enable it to serve as an informative display of cultural relevance. If

physical access is allowed into this room during intermission, which is essentially a management decision, it would provide an extra lounging place during intermissions with an unique set of intellectual and visual stimuli not found traditionally in a recital hall lobby environment. The upper room, virtually isolated from the street scene and opening principally onto the upper lobby bridge, is intended as a display area for students' art work and special programs of exhibit. The Hebrew Music School runs a program of Sunday School for crafts for young children, and this space provides an appropriately ceremonial showplace for their work. This is another form in which the school's activities, symbolically and in a somewhat overly polished fashion, are conveyed to recital patrons as an additional source of excitement that identifies this particular public assembly place with a unique character and association.

29



A great degree of transparency is built into the lobby space and its surroundings by means of small clear volumes extending over two stories and light construction and infill materials. Because of very dense packing which is attributed to economical and volumetric constraints, subdivisions of spaces are very tight. Despite a large degree of transparency, the lobby does not convey itself as a singular space but as a series of characteristic places consistent with the scale of gathering that can occur in this building. The shape of the recital hall, somewhat forced in form, is made clearly visible through incorporation of a different material distinguishing it from the concrete and steel/glass assembly around it, and serves to define the lobby space where its presence can be discerned throughout.

IV. DESIGN STUDIES

4. DESIGN STUDIES

4.0 List of Figures

1. Diagrams of layout.
2. Proposed spatial layout diagram. Major distribution space serves as unified lobby.
3. Photograph and analytic diagrams of S. Carlino showing Portoghesi's interpretation of Baroque spatial ordering. Portoghesi: Borromini: Architettura come Linguaggio.
4. Photograph and analytic diagrams of S. Carlino showing Portoghesi's interpretation of Baroque spatial ordering. Portoghesi: Borromini: Architettura come Linguaggio.
5. Diagrammatic plan and view of Casa Andreis by Portoghesi. L'Architettura, volume 12, number 10.
6. Diagrammatic plan and view of Casa Andreis by Portoghesi. L'Architettura, volume 12, number 10.
7. Parish Cneter in Demetrode, Alvar Aalto. Fleig: Alvar Aalto: III. 1963-1970.
8. Diagrammatic sequence, Demetrode.

9. Experiments in wood, Aalto. Fleig: Alvar Aalto: I: 1922-1962.
10. Experiments in wood, Aalto. Fleig: Alvar Aalto: I: 1922-1962.
11. Villa Mairea, Aalto. ibid.
12. Diagrammatic sequence, Villa Mairea.
13. Analytic diagram of Acropolis, Athens. Doxiadis: Architectural Space in Ancient Greece.
14. View of reconstruction model, Acropolis, Athens. Scranton, Greek Architecture.
17. Early design sketches.
18. Diagrammatic illustrations:
 - a. Three enclosed volumes.
 - b. Front open zones.
 - c. Edge zone containing b.
 - d. Back open zones.
 - e. Edge zone containing d.

19. Illustration of structural development.
20. Early sketch of building structure.
21. Diagram of prototypical sections.
22. Typical edge zone, studio portion.
23. Typical edge zone, faculty and administration portions.
24. Axonometric of typical edge zone, studio portion.
25. Axonometric of typical edge zone, faculty portion.
26. Axonometric of typical edge zone, administration portion.
27. Early sketch of entrance by the small assembly volume.
28. Early study of the middle-sized volume.
29. Early study.
30. Early scheme.
31. Carcieri drawings by Piranesi. Piranesi: Drawings and Etchings at the Avery Architectural Library.
32. Carcieri drawings by Piranesi. Piranesi: Drawings and Etchings at the Avery Architectural Library.

33. The Spanish Steps, Rome. Rasmussen: Experiencing Architecture.
34. Elevation study along Huntington Avenue.
35. Axonometric study of dormitory portion, delineating the volume of the dining hall, the lobby leading to enclosed bridge over Gainsborough, and the main residential portion.
36. Axonometric sketch into the unified lobby.
37. Pattern of circulation, early sketch.
38. Axonometric study of the effect of the large assembly volume on the lobby.
39. Axonometric into the lobby.
40. Roof plan study.

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The design exercise outlined in the following chapter comprises the final and major part of the studies in this document. It was initially projected that the process through which the design work would progress would play a definitive role in establishing, informing and clarifying the content and substance of this search.

The exercise consists of a hypothetical re-design of built facilities for the New England Conservatory, at its present location. The intention regarding the definition of the scope and content of this exercise was to use the Conservatory's present location as hypothetical site, with its surroundings as a given, and to take the existing activity pattern with modifications and alterations as the building program for a new design. This was done to concentrate the design effort to the initial interest of the study--to understand the interaction between the special


public gathering events that take place in a building, and the daily activities in the same building, and to understand the way each might enhance the other toward an identifiable character and quality of the total built environment.

4.1 Program

While the initial intention regarding the program was to adopt the building program at the Conservatory as it exists as ready-made data, some modifications and alterations were felt necessary after examining the activities of the Conservatory and its relationship to the present built stock. As such, the modifications and alterations proposed herein bear a close correspondence to the critical observations of the present building's operation described in an earlier chapter.

Aspects of the existing building program which seem to call for changes are listed below as a recapitulation of the above-mentioned chapter:

- Provisions for the library facilities--the present fragmentation of the library facilities is a consequence of growth and inadequacy in planning. A more unified set of facilities, continuous and identifiable as one entity, is felt desirable to facilitate cross-referencing uses and management.
- Rehearsal spaces--large rooms for instrumental rehearsal.
- Provisions for more faculty offices and/or lounging.
- Student lounging areas--places for communicating, socializing and relaxation are necessary and should serve a determining role upon the perceived character of the building.

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- Overall capacity--based on the need of the Conservatory for more space, the overall capacity of the proposed design should exceed that of the existing built facilities, if possible, by as much as 10%.

This last point, beyond being a purely programmatic provision, has some aspects that should be discussed. By allowing for an increase in capacity, together with additional spaces for such activities as lounging (which are virtually non-existent in the existing building) a greater degree of freedom in spatial manipulation may be gained in dealing with the main interest of this study, which is the interaction between the gathering events and daily activities. The existing urban context of the area can easily absorb an increased capacity of 10%. The surrounding major buildings are considerably taller than the existing profile of the Conservatory facility, so

that greater height on this site would not adversely affect the characteristics of this area. The proposed increase in overall capacity, taken with introduction of new facilities, upgrading of circulation spaces and introduction of lounging spaces will tend to affect the volumetric aspects of the proposed design significantly, but the site is capable of accommodating building heights over twice the existing three stories. As the existing program is examined, one characteristic becomes evident that might help in understanding the nature of space allocation in an institution like the New England Conservatory. As mentioned earlier, most of the existing Conservatory building is comprised of small enclosed rooms. While the specific activities associated with such rooms vary from administration and faculty offices to practicing rooms and studios, the physical size of the

112
9

room does not seem to correlate to different activities and the varying number of individuals to be accommodated. A generalized design approach for these enclosed room activities should facilitate the decision-making process of space assignment over long periods of time. A certain amount of uniformity in dimension and character of rooms will result in interchangeability of activities and zones of groups of activities. The accompanying illustration depicts a fairly standard room size of 4m x 6m as a basic unit. The room size is designed to accommodate the activity requirements of administration, faculty, studio instruction and student practicing. As the units relate to circulation on one side and exterior on the other, a row of such units can be formed, and once a standard depth is established, room widths can be varied to accommodate activities requiring a larger

dimension. There is also a degree of freedom in the direction of the depth of the room in conjunction with space allocated for circulation. A separate section will discuss that aspect later in this chapter. The generalization of activity dimensions as seen above enables a simpler grasp of the programmatic requirements which otherwise appear complex.

A program projection for the proposed new design is outlined below in its simplified form:

PROGRAM PROJECTION FOR DESIGN PROPOSAL

	<u>Approximate Size</u>	<u>Notes</u>
Assembly Volume 1	1,000 seats	
Assembly Volume 2	500 seats	
Assembly Volume 3	300 seats	
Library	1,100 m ²	Housed in one volume
Piano Shop	250 m ²	
Copying Service	150 m ²	
Recording Studio	80 m ²	

Individual Rooms

Studio/Practicing	74 rooms	Variable sizes
Faculty Offices	15 rooms	around
Administration	40 rooms	$4\text{m} \times 6\text{m} = 24\text{m}^2$ per room
Classrooms/Ensemble Rooms	22 rooms	$8\text{m} \times 6\text{m} = 48\text{m}^2$ or larger preferably with high volumes especially for ensemble

Circulation as required
 Lobby spaces for assembly volumes
 Lounging facility throughout
 Display areas
 Concession
 Music shop

A place to obtain refreshment is proposed as a part of the program to serve lounging needs and as a way to enliven the character of the school building. Revival of the music store should serve the latter purpose as well.

4.2 Diagrammatic Development

As a way of understanding the interaction between the public gathering event and the daily activities in physical terms, an expansion of the earlier diagrammatic study on the sequential experience of procession is attempted here. In the existing New England Conservatory building, emphasis is placed on accommodating all of the necessary layers of spaces leading toward Jordan Hall. This is achieved in a very small spatial interval, thereby diminishing the depths of all the components involved. Further complication has resulted from the fact that the school circulation cuts across this axis of procession, adding an extra layer to be negotiated. This leads one to think that the experience of procession itself may be re-examined to arrive at a spatial solution more accommodating both to the gathering event and the daily activities:

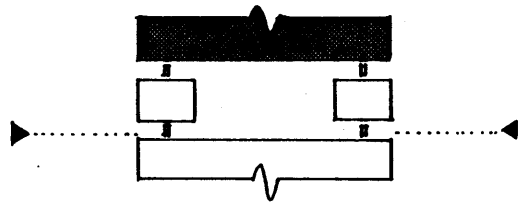
Furthermore, the Conservatory's original multiple, independent access pattern has undergone changes so as to minimize the number of access points to the building, forcing the school circulation to double as the principal and sole public access to Williams Hall. The number of entrances to the existing building has diminished over time from four to just one, with the Brown Hall entrance added only for specific events there. The negative impact of closing direct access to Williams Hall is that the school circulation, which one must pass through to get there, provides no associative clue as to one's final destination and does not help to gradually heighten the experience of visiting the recital hall.

The accompanying diagram outlines a possible organization that might lessen the feeling of conflict of multiple objectives this building must serve. Diagrams from the

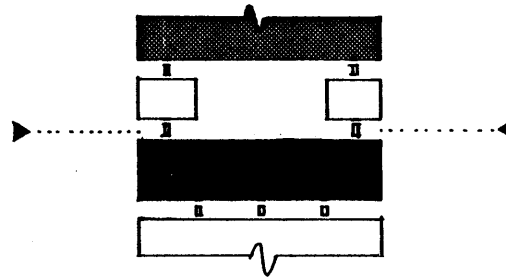
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earlier section in sequential order are recapitulated here for comparison. A typical spatial sequence in this diagram consists of entry vestibule, a distributive space which also serves as principal lounging, small area for ticket collection, and the assembly volume. Alternatively, the daily activities can be accessed through the distributive space, bypassing the assembly volume. Points of control for access to the assembly volume are brought as close as possible to the assembly volume itself. This enables highly localized access control and permits constant use of the distributive space for general lounging and circulation. Any number of events can occur simultaneously with the daily activities of the school up to the full capacity of the building. This, in essence, is an expansion of the diagrammatic construct

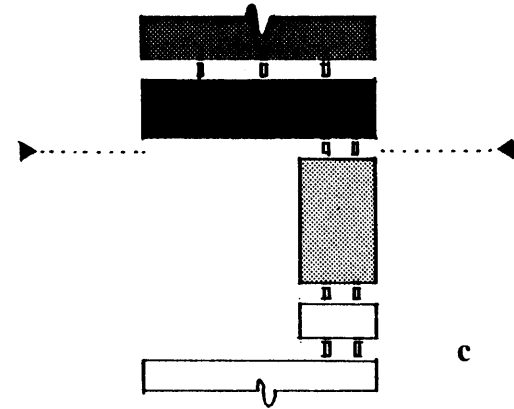
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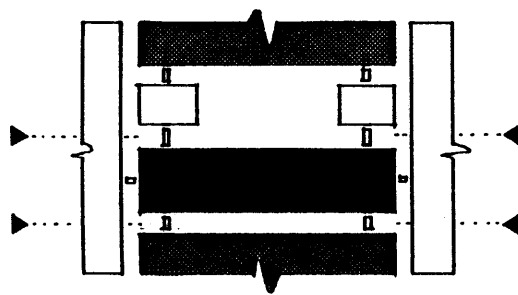
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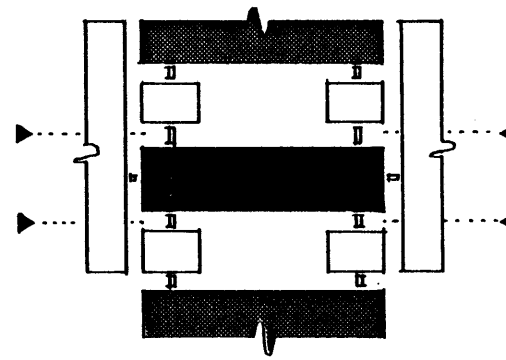
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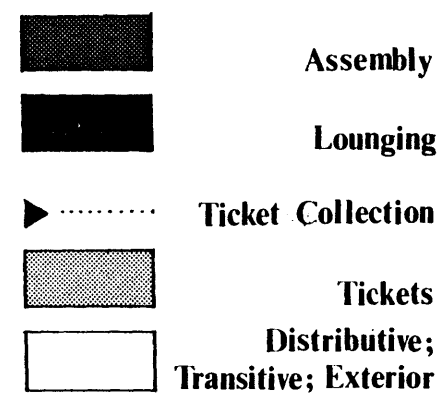
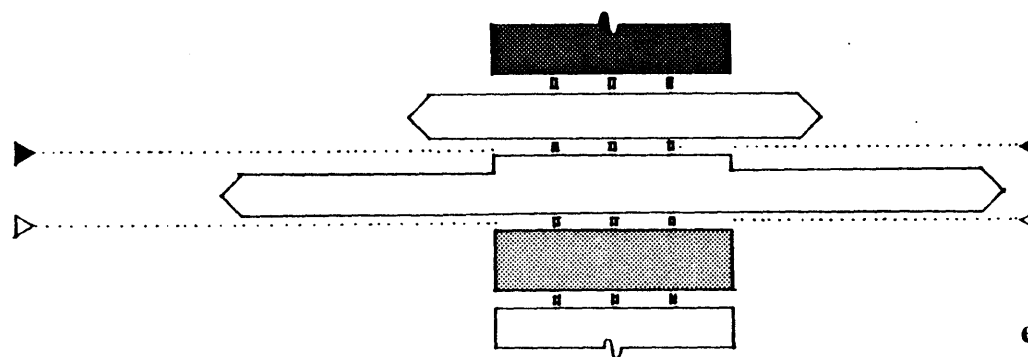
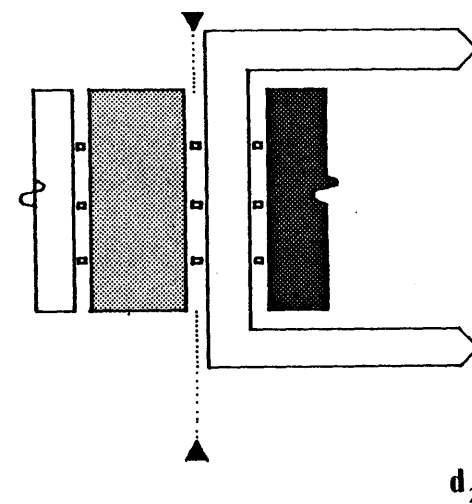
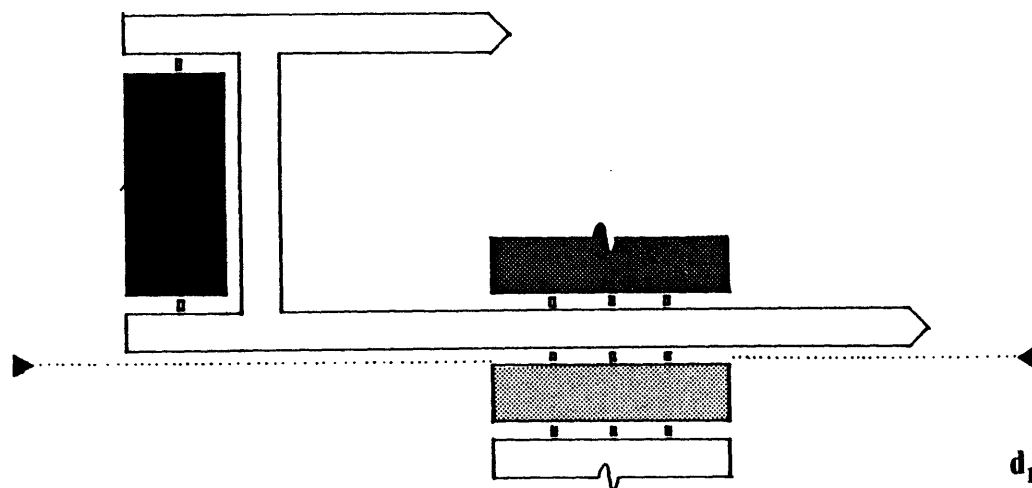


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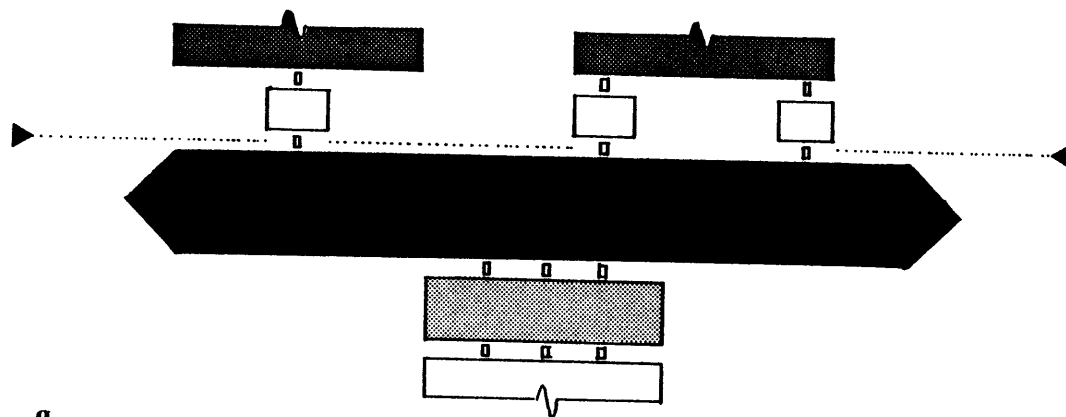
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adapted at the Juilliard School where one common entry is provided for connection to all of the functions within.

The entry lobby at Juilliard seems to function solely as a distribution point and a buffer zone to isolate one activity from another. The key difference between the proposed diagram and the organization principal at Juilliard lies in the nature of that distributive space. Whereas Juilliard (diagram f) has provided separate lobbies beyond its distributive entry, thereby isolating the lobby activities of each domain, the proposed diagram calls for smaller entry zones between the distribution space and the assembly volumes, thereby forcing the lobby spaces into the distribution. The lobby activities, are thus no longer identified solely with each assembly volume, or other school facilities. Rather, the lobby becomes a place to lounge or move through, where

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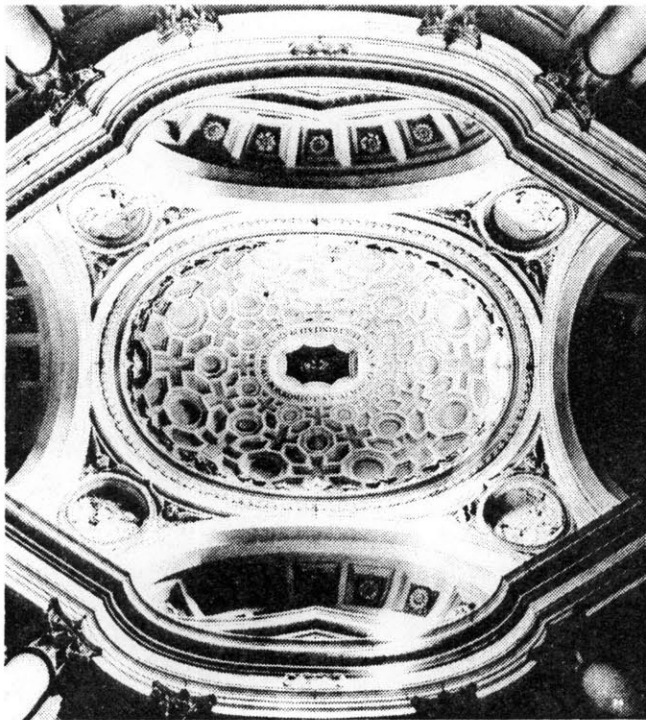
one can expect, more or less, a constant presence of people though varying in number. A base level of population is provided by the school's daily activities that go on throughout a typical day and continue into the evening at a somewhat reduced level. The lobby space should be large enough to absorb the additional population contributed by the assembly volumes when events occur in them. Having adopted this diagrammatic organization, the topic of the interaction among the various gathering activities and the daily school activities can be fully explored by concentrating on that central, unified lobby space and various means of connection to and from other activity spaces of the building.

4.3 Spatial Disposition

Beyond the level of this abstract diagrammatic development a fairly concrete grasp of the physical form

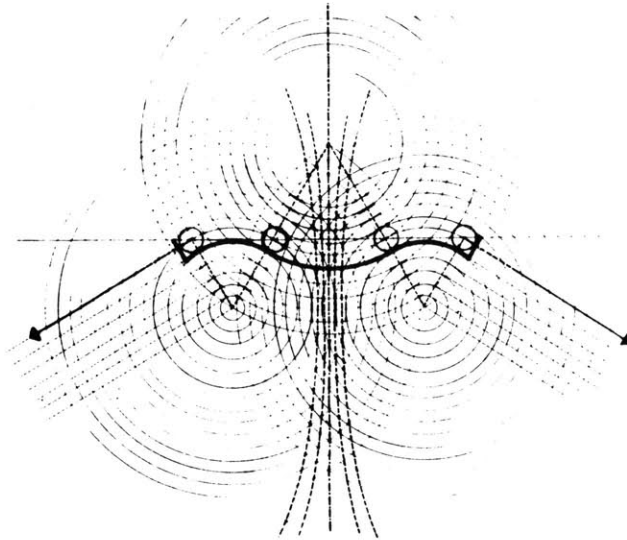
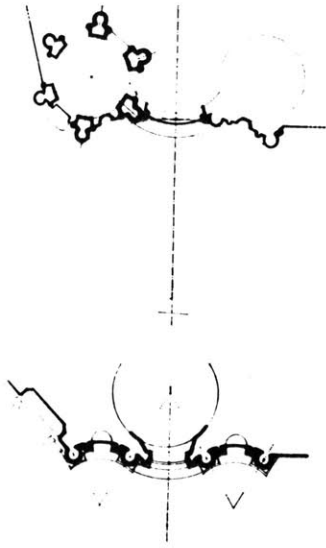
must be arrived at. The process of moving toward and then into any assembly volume requires a gradual preparation from the street into the enclosed realm of a highly prepared experience. For this reason, the model of singular spatial layering cannot adequately serve a multiple number of assembly volumes. Ideally, each of the assembly volumes should possess a certain frontality to signify the experience of entry. The unified lobby should account for the multiple number of local axes and the spatial layers propagating from the respective assembly volumes. The unified lobby becomes a physical representation of the interaction among the principal assembly volumes and the school facilities--a field of concurring or colliding influences from various volumes whose frontal edges will determine the extremities of the shared lobby space.

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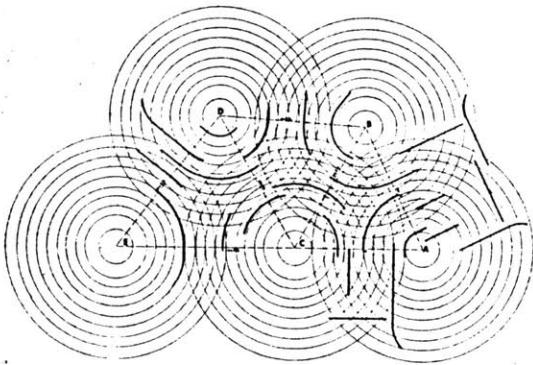


Such spatial fields can be observed in many of architectural works by Paolo Portoghesi. Portoghesi's definition of space as a 'system of places' is elaborated upon in his architecture through literal geometric generation of superimposed multiples of cylindrical coordinate systems. Places are signified by singular points each of which generate a concentric field of influence around it. And the juxtaposition of these concentric fields varying in intensity, yields an inflected pattern of spatial enclosure. The resulting form is strongly reminiscent of the Baroque spatial articulation, studied extensively by Portoghesi.⁽¹⁰⁾

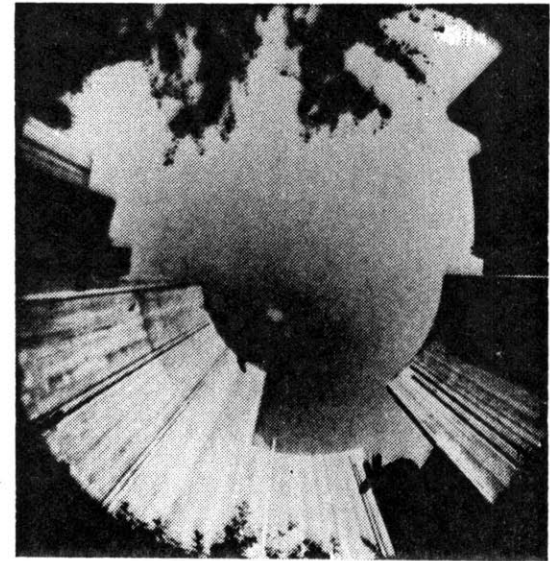
Whereas Portoghesi's method of generation seems to reinforce a rather abstract grasp of space and a highly disciplined spatial construct, one may look toward the works of Alvar Aalto for another manner in which



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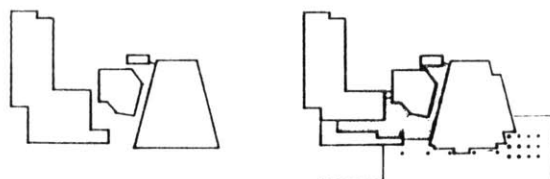
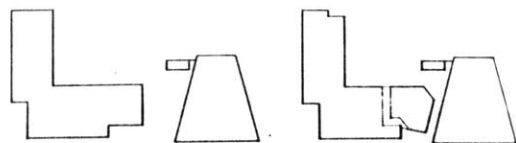
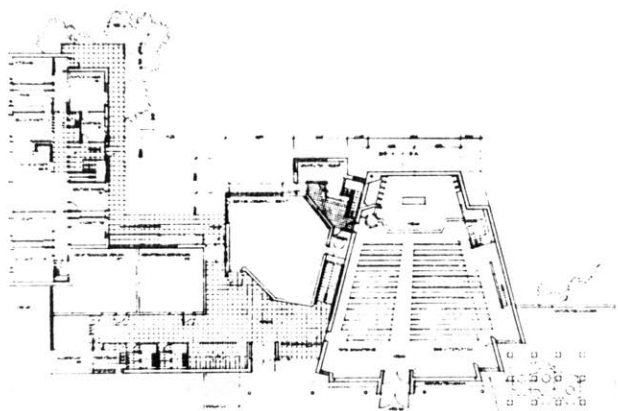
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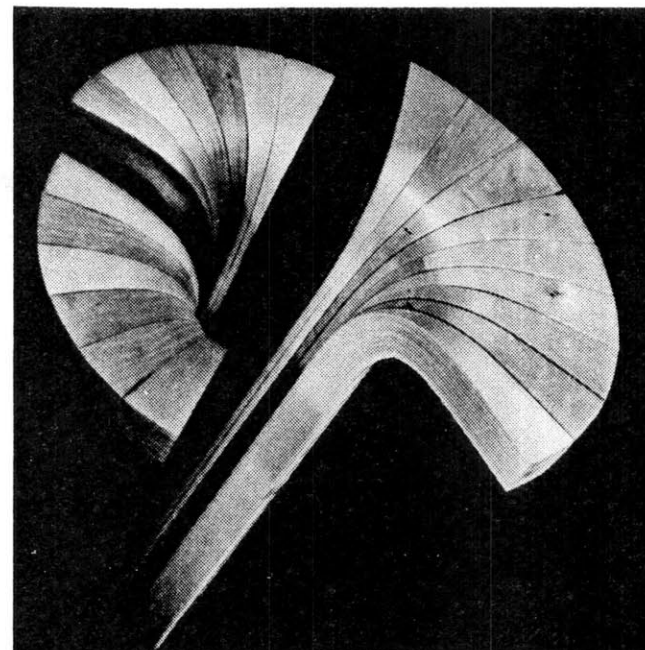
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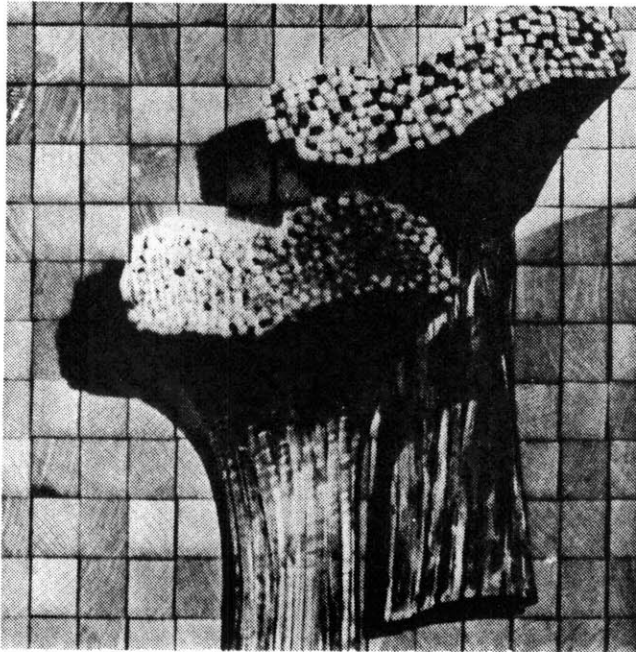
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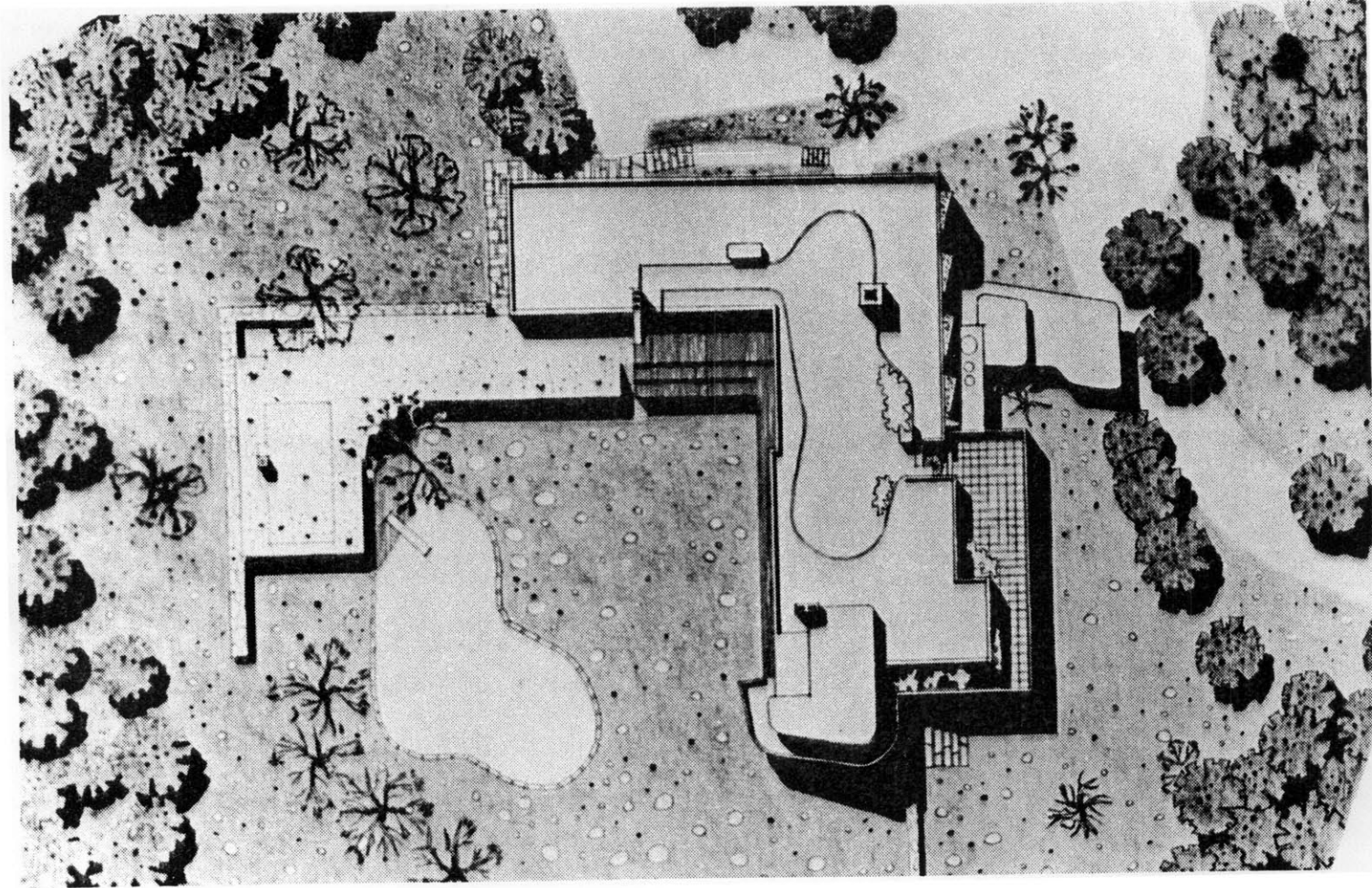


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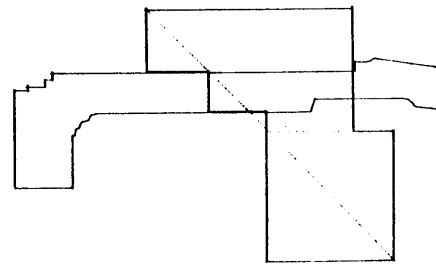
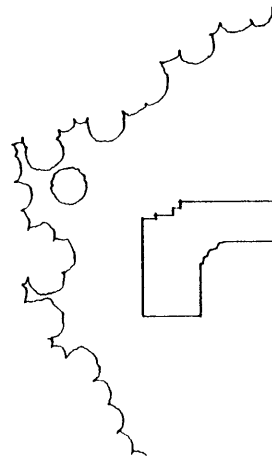
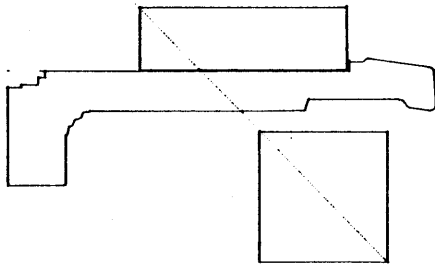
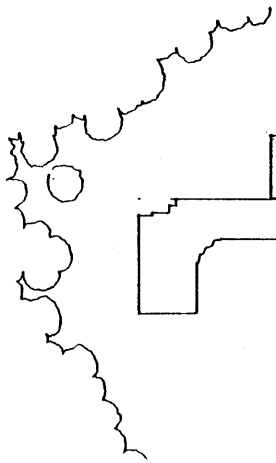
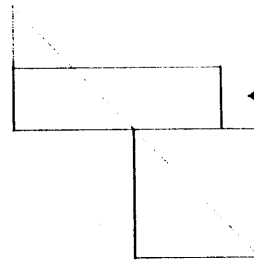
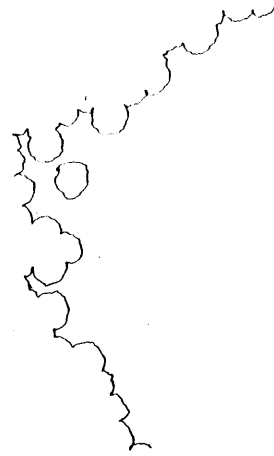
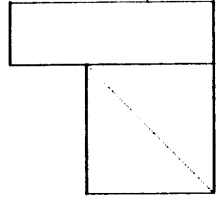
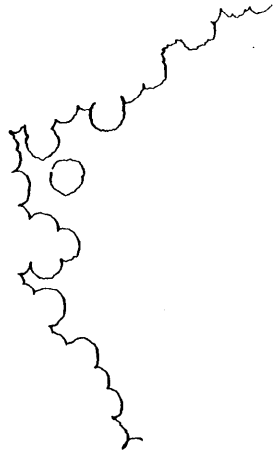


individual parts or places can form the physical definition of a shared domain.⁽¹¹⁾ In much of Aalto's work the principal parts employed in generating a building consisting of largely opaque volumes, such as town meeting halls and concert halls. Such a volume, in its opacity (or completeness of enclosure), and specificity of form constitute the tactile equivalent of masses possessing specific physical characters such as inertia, weight and elasticity. The masses are manipulated, literally pushed around, to achieve a programmatic and formal correspondence. During this process various deformations occur through interaction of individual masses. This transformation can be illustrated in a simple case of the Parish Center in Datmerode, Germany. The smaller meeting hall can be seen as a part of an L-shape, fractured away and pushed up by the slanted edge of the

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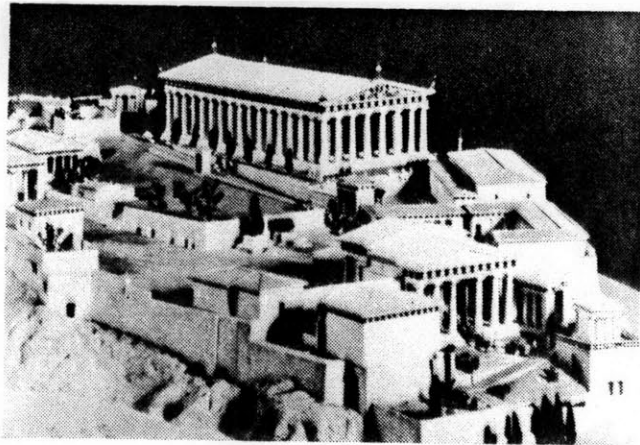
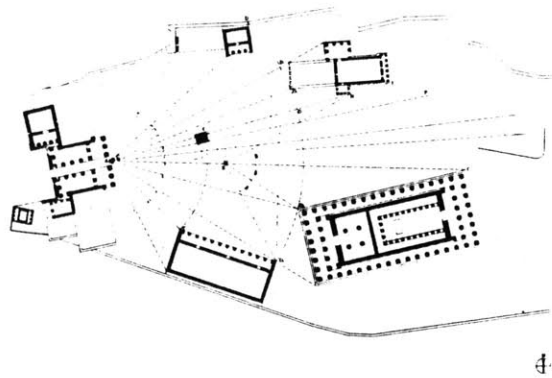
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larger meeting hall, resulting in a displacement in the front portion of the assemblage. That displaced area has quite naturally become the entry vestibule of the building. In Aalto's work major public spaces are created through placement, interaction and displacement of various masses within the building. The resulting spaces tend to attain an open character which portrays them as extension or equivalent of the outside. This character derives from the free-formedness of the confining edges of such a space and its circulation patterns which make it a distributional node for the various masses relating to it. In many others of Aalto's works, masses assume curvilinear shapes formed through tension and *compression* somewhat reminiscent of his material studies for furniture design. Villa Mairea displays a

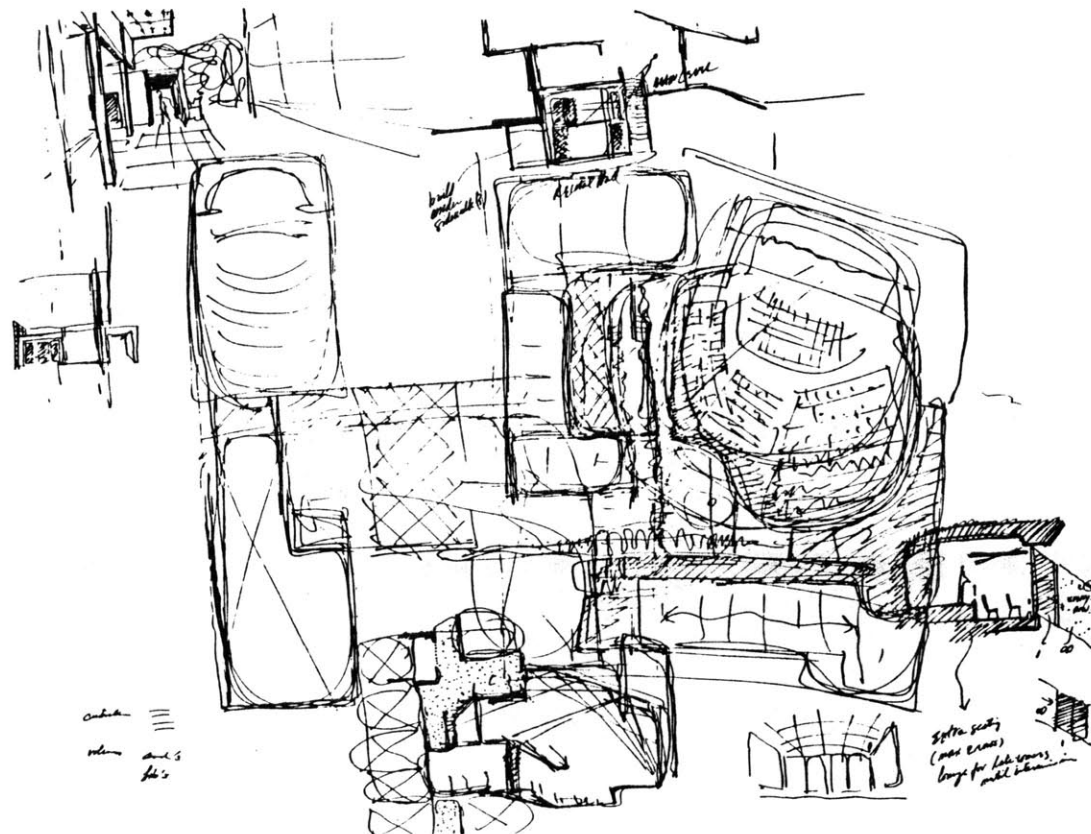
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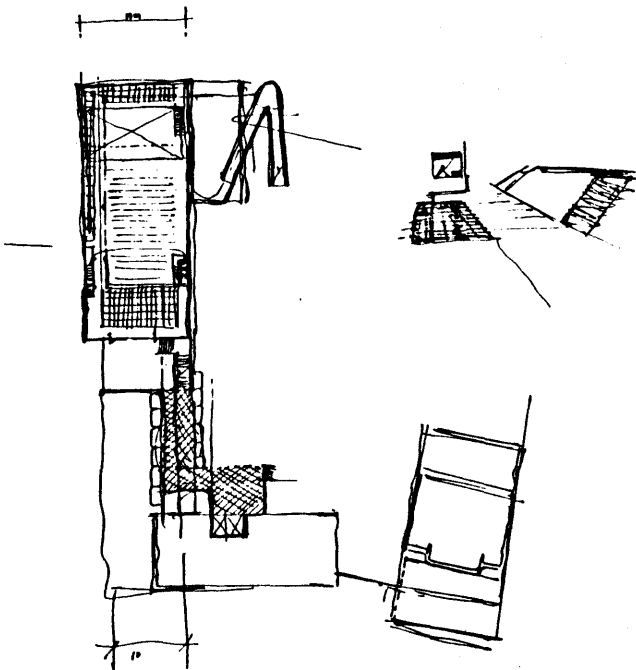
similar process of kinetic/dynamic analogue in a more refined, graceful manner.

A method of defining exterior spaces can be identified in the formation of ancient Greek temples, as explained by Doxiadis.⁽¹²⁾ Here, spatial definition results from ordering the visual field into a composition of solids and voids. Rectangular solids are placed to reveal themselves at some angular displacement, thereby exposing the front and the side simultaneously. A sharp contrast is evident between this method and that employed by Portoghesi, in which the strong undercurrent of the notion of enclosure dictates a one-to-one correspondence between the conceptual field of various places and its physical representation.

Returning to the objective of arriving at a physical form of spatial disposition, the following approach is proposed: Identifying the three assembly volumes as



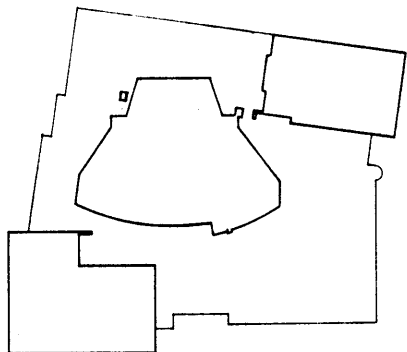
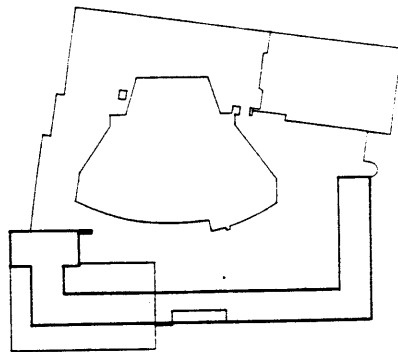
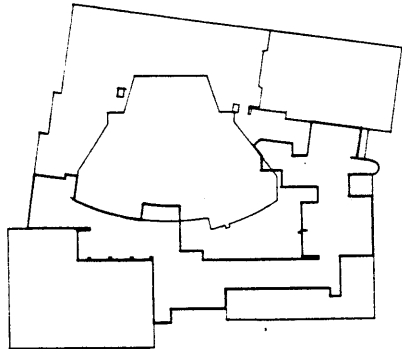
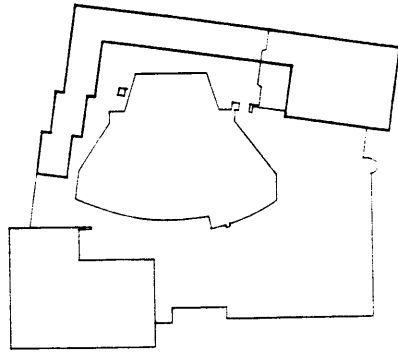
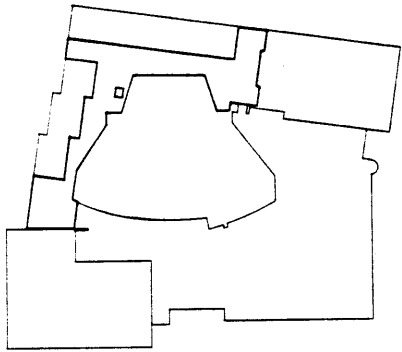
17-2




essentially enclosed masses, one may visualize the building as consisting of these masses, sets of enclosed rooms housing the daily activities, and the unified lobby space formed through interaction of the enclosed rooms and assembly volumes. Juxtaposition of these masses should yield an overall form of the lobby and various conditions of sub-spaces within it. The diagrammatic illustration of the final scheme is found in the accompanying figures. An additional determinant here is the aspect of back and front. If the activities in the lobby constitute a more public side of the building, there must be a contrasting casual side, where storage, service and activities requiring or preferring less public exposure take place. The existing Conservatory building makes no such provision, and the assembly volumes are placed back to back making storage

142

and direct transfer of equipment (chairs, instruments, etc.) difficult if not impossible. Some storage provision behind the assembly volumes would be useful, and the functions of the three assembly volumes could be joined through this back area, as shown in the accompanying diagram. Areas requiring heavy servicing, such as the copying service and the piano shop can be placed in this back position as well. The resulting form shows the three assembly volumes strung along the diagonal, facing toward the Huntington-Gainsborough corner which is the primary public corner of this site. The diagonal grouping, then defines a front toward that corner, and a back with direct access from St. Botolph Street. The resultant front and back can be enclosed by strings of enclosed rooms for daily school activities. In the back, the interaction of the backs and sides of assembly volumes





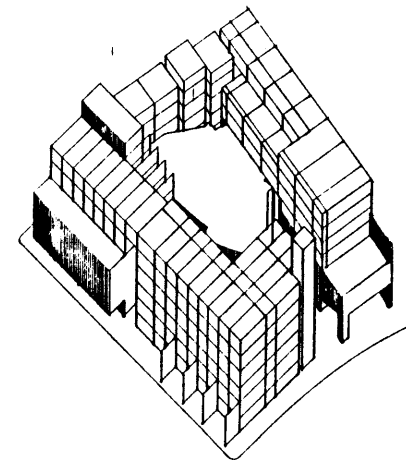
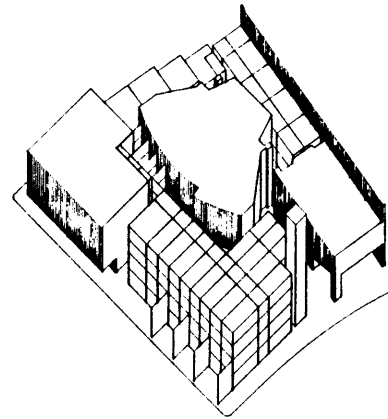
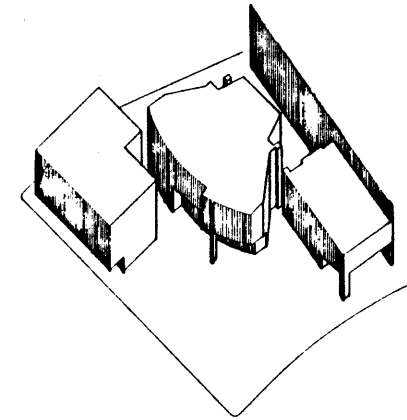
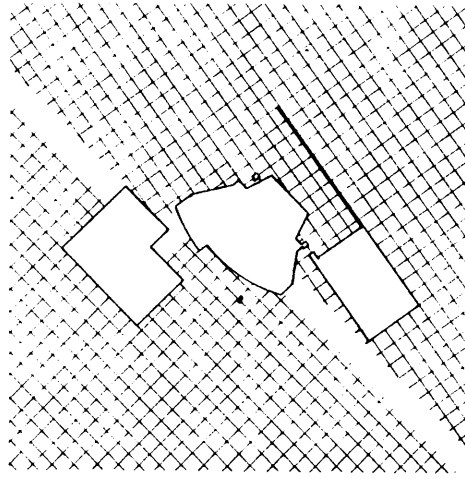
and the enclosed rooms define a corridor of varying width, enabling local storage of stage-related equipment in the direct vicinity of the assembly volumes. The corridor in conjunction with a back elevator would enable direct transfer of equipment, maintaining close communication among the backs of the assembly volume and the servicing functions.

In the front, the walls of the assembly volumes and the enclosed rooms define the unified lobby. A lobby defined in this manner is characterized by clear legibility of its constituent components. The masses of the assembly volume possess characteristic formal attributes reflecting their own internal organization, resulting in highly visible and identifiable forms within the lobby space. The enclosed rooms of the school activities face the unified lobby and generate a soft defining edge with

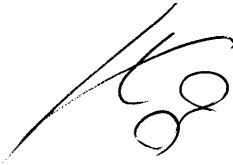
circulation and lounging mediating the lobby proper and the enclosed rooms.

Provisions for building structure are intended to reinforce the spatial composition above. The three assembly volumes are projected to possess their own independent structural discipline. Within the region of perimeter enclosure of any one of the assembly volumes, the structure will behave to serve the enclosed volume alone, and it will possess physical attributes derived specifically from the workings of the interior volume. This device of assigning independent structure to each of the assembly volumes enables one to perceive them as isolated masses whose disposition in a neutral field comprises the key in defining the unified lobby.

The resultant form in the final scheme represents this process, as inflected by the additional consideration



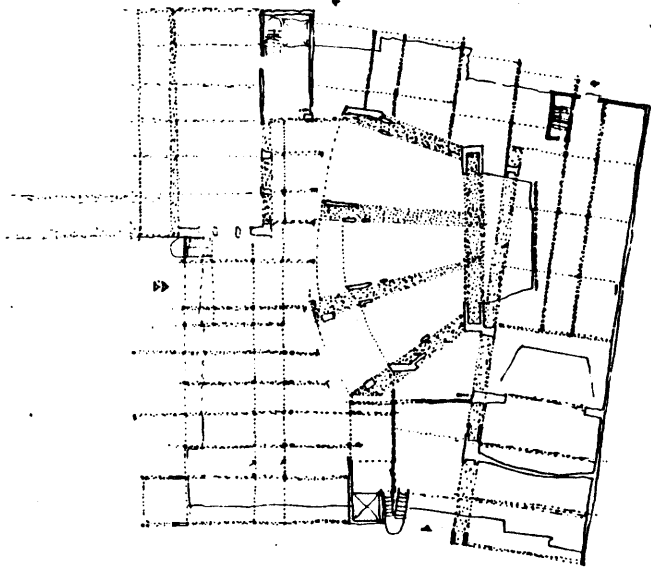
of addressing the street edge condition. Where the assembly volumes reach the exterior periphery of the building mass (as happens twice under the diagonal arrangement), a surface configuration consistent with the street edge geometry is considered desirable in contributing to the continuity of the street experience. Thus the independence of structural form is maintained only in the large middle assembly volume, and the two smaller volumes assume rectilinear geometry. The parts of the building other than the assembly volumes can be characterized as residual, only because of the neutral role these portions play as structural components. Some form of regular Cartesian geometry should suffice to provide structural support in these portions. It is also projected that a highly regularized structural articulation will serve as a visual orienting device within these




residual portions which, otherwise, may be perceived as highly irregular. The front part of the residual is assigned a Cartesian grid consistent with the street geometry. The back part is assigned a grid originating from the only interior border of the site which forms a straight line across the southwest edge of the property. The two smaller assembly volumes are merged into the Cartesian grids affecting transitions of front and back. These assembly volumes attain a dual character: they are perceived as a part of the respective orthogonal geometry, which associates them with the daily school activities on one hand; alternatively their masses resemble the largest assembly volume in scale, tying them back to their public gathering role. This ambivalent shift of grasp as to the role of these two smaller assembly volumes is consistent with the projected use

pattern. The largest assembly volume hosts outside events most frequently, while these smaller volumes primarily serve the school's own progress recital programs by students and faculty.

The orthogonal grid portions of the building structure can be realized by reinforced concrete of small dimensions. Significantly large spaces occur only in the assembly volume portion, especially those over the largest auditorium. Here spanning members of significant total depth must be provided. The fusion of the two smaller volumes into the orthogonal grids provides an opportunity to support room-size spaces above them with relative ease. And designating the top of the largest assembly volume to remain unbuilt, a courtyard can be formed to serve as a summer lounging place with immediate connections to the upper stories housing most of the





school's daily activities. The upper stories enable double loading of circulation; since the courtyard provides exterior exposure to the inner ring of rooms.

4.4 Principal Components

The linear run of rooms, accommodating the school's daily activities, must possess a resilient edge at the interface with the lobby to respond to the varying boundary conditions that marks the physical and perceived extent of the domain of the activity in the lobby, during performance, intermission and the school's daily operation. The schematic design provides a zone in front of the rooms in which visual and physical shielding can expand to include the circulation reaching these rooms as part of the lobby domain, or as part of the school domain, with access controlled during a gathering event.

The accompanying diagram describes the prototypical section pattern introduced above. Each section variation can possess up to three distinct intervals, as described below.

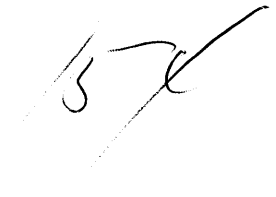
The first interval represents the minimum width for circulation providing access to the rooms at the exterior edge. Here a certain minimum width, typically 2m, is to be maintained unenclosed and continuous throughout the linear run of rooms. The enclosed individual rooms represent the other extreme of the three intervals. They are accessed laterally from the circulation. Within this interval, total enclosure by doors, windows and partition walls is possible, and activities requiring visual and acoustical separation from the public domain can occur. Such space is typically needed for administration and faculty offices and for practice rooms and studios.



As these are isolated rooms, independent exterior exposure and connection to the public domain are highly recommended. These features can be modulated by means of transparency across the spatial boundary. Typically, some visual connection between the domain of circulation and practice rooms or studios is expected almost as a rule. Need for contact, or potential thereof, with passers-by is a real one to alleviate the feeling of isolation and excessive privacy under the arrangement of individual instruction. Even in the acoustical domain, some amount of transparency may add to the experience of being in this building. In the existing building of the Conservatory, with its severe lack of both facilities and maintenance, acoustical *separation* between the school circulation and the studio rooms is virtually non-existent. Yet this seems to produce a singularly identifiable character

to the experience of being inside this building in its daily operation. As the studios and practice rooms are constantly occupied, the corridor is flooded by fragments of music. Moving past door after door is a rare experience in which the rate at which one interacts with the local flux of various pieces of music to produce a collage of sounds. Surface materials as well as volumetric dimensions can be utilized to reinforce positive aspects of this experience by allowing local zones of varying intensity and degree of mixing of sound.

The third of the three intervals of the prototypical section is a zone of variable enclosure. This zone mediates between the domain of the lobby and the school activities. In terms of activities, this zone serves activities which require greater exposure to the circulation such as work areas for receptionists,

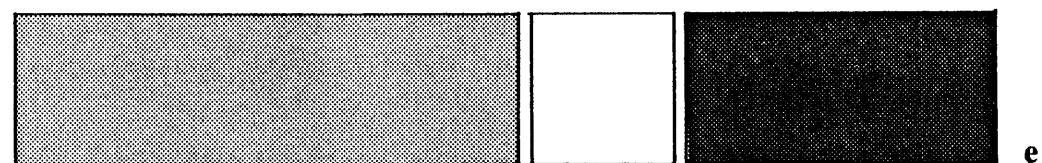
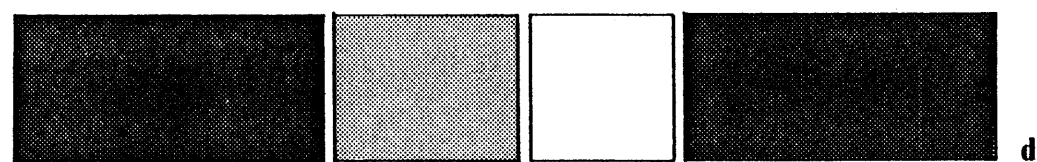
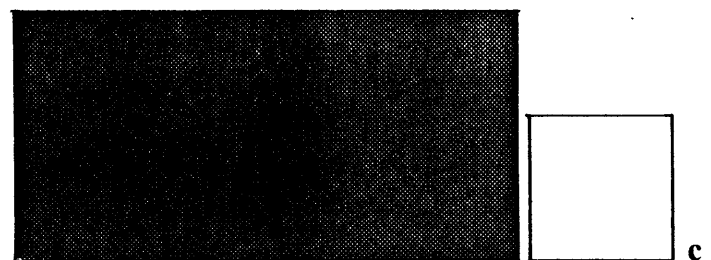
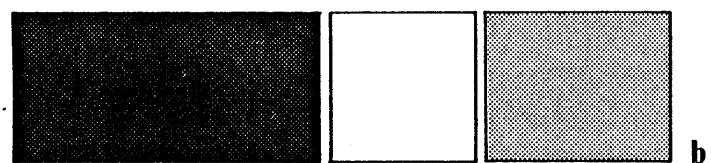
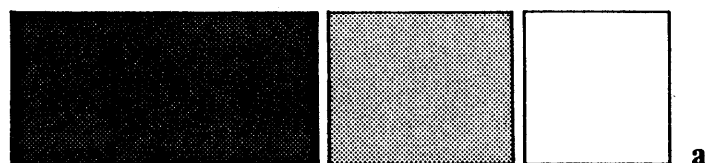


administrative assistants, and information center, and relaxation and lounging.

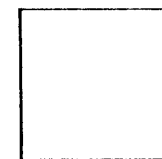
The above three intervals can be combined in a variety of ways to form prototypical sections, as illustrated in the following diagrams:

(21)

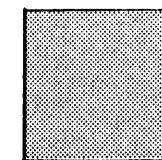
- A: Circulation--reception -- private office assembly; typical in administration practices where an assistant is assigned specifically to and works closely with the administrator or faculty member.
- B: Circulation separates the private offices from the semi-enclosed zone; useful where a number of enclosed offices work closely with one or more assistants in the semi-enclosed zone; also, casual lounging can be placed in this pattern in conjunction with office, studio or practice areas.
- C: A limiting case where the zone of variable enclosure



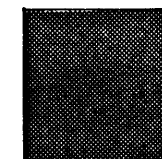
Circulation



Variable Enclosure



'Room'



21. Prototypical Sections



is absorbed by a room larger than the typical size. Larger offices with ensemble rooms call for this arrangement. With ensemble rooms, two-story-high clear interior volume is recommended.

D: Double-loaded condition with the open zones overlapped.

F: Variant of D where a large lounging or open office area occurs on one side of circulation.

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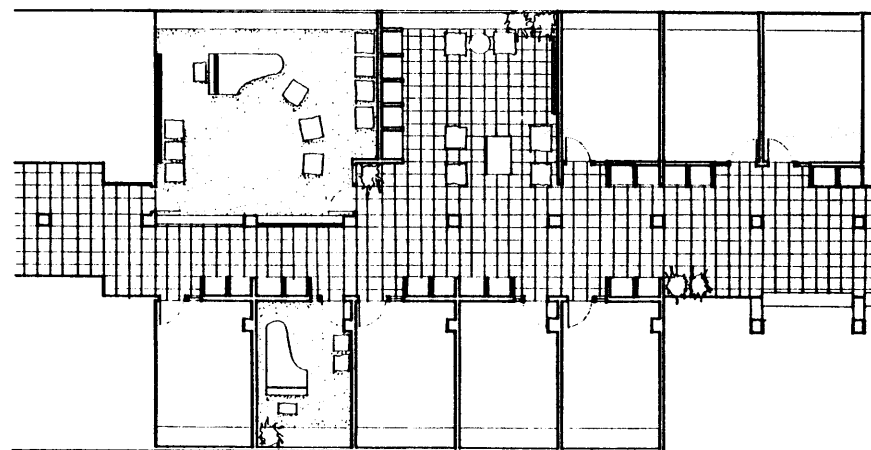
Accompanying figures illustrate a projection of the administration, faculty and studio/practice room sections:

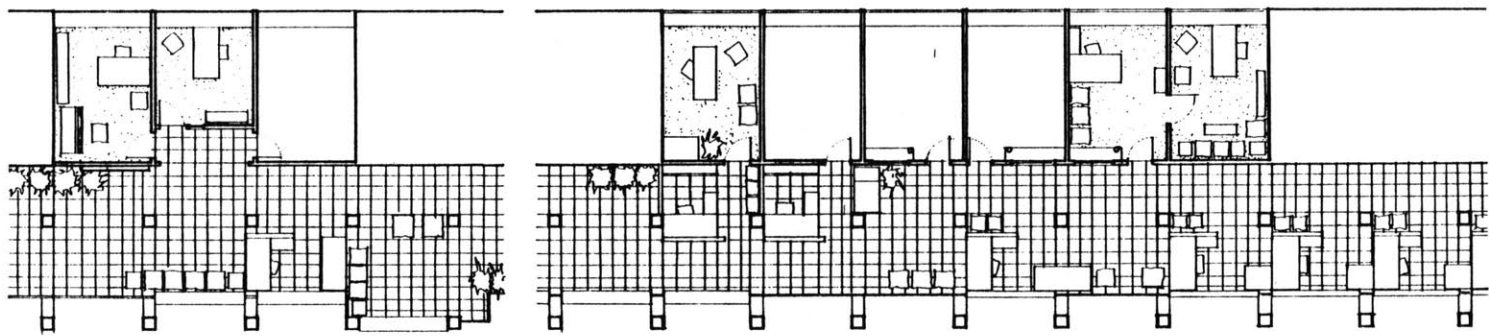
Administration Section: indicates case of A and B; transition between the two section types yields opportunity for casual lounging, particularly useful for visitors waiting to see the administrative staff in addition to general uses; room partitions can vary in position and permeability.

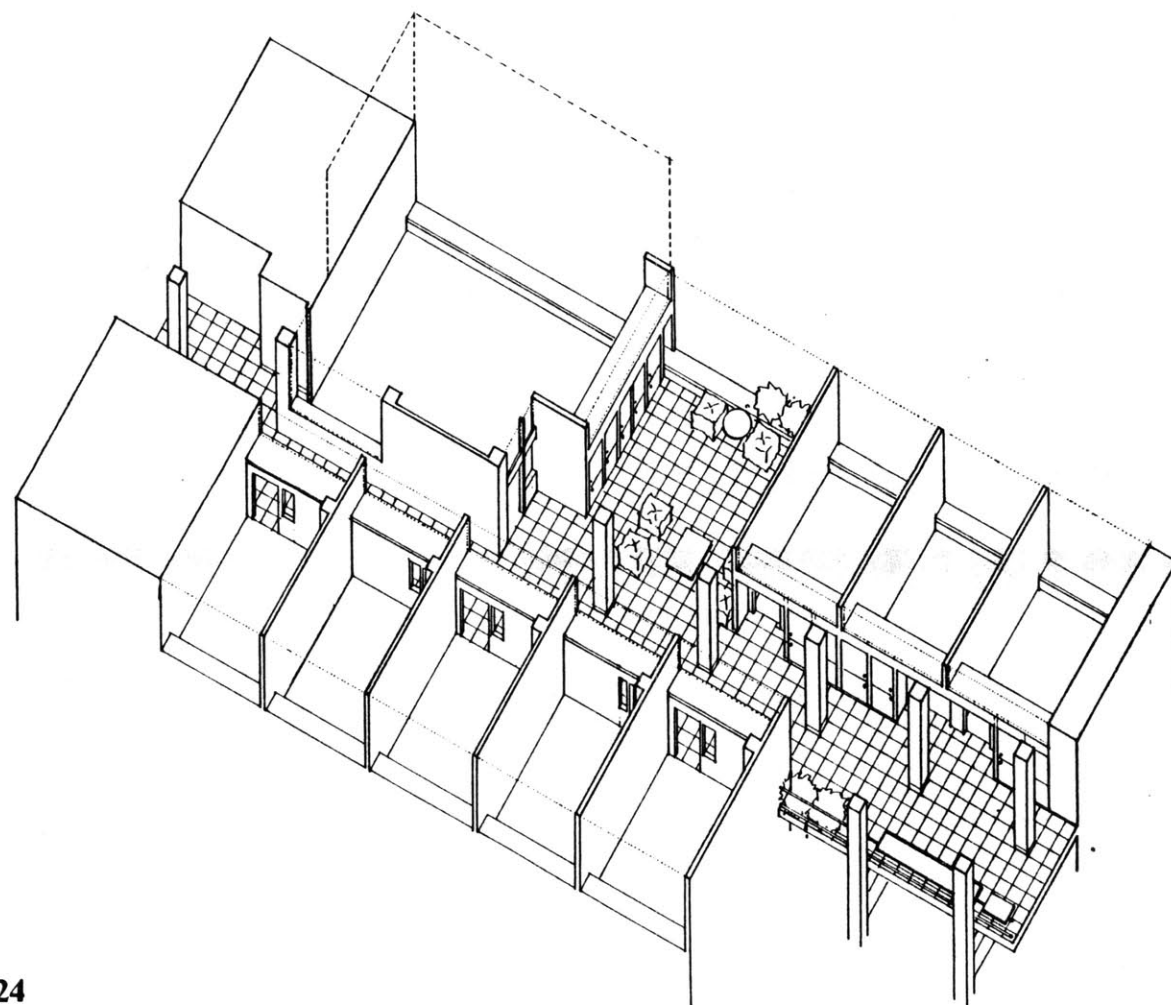
Faculty Section: indicates B as primary section type as the faculty members tend to share an assistant who also oversees access by visitors to the faculty offices, from the work area more exposed to the public domain; also a general lounging area in section type B is indicated; horizontal band of glazing above head-level should provide a sense of daylight while at the same time freeing the wall spaces for information, announcements and display.

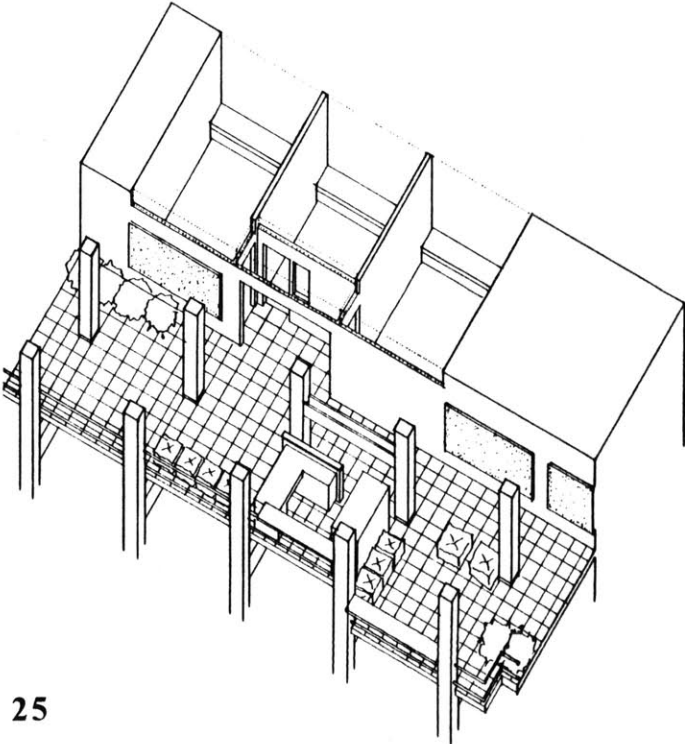
Practice Room/Studio Section: indicates a combination of all section types, individual storage for students' instruments and person articles, and entry into studio spaces form a transitional layer between circulation and studios/practicing rooms.

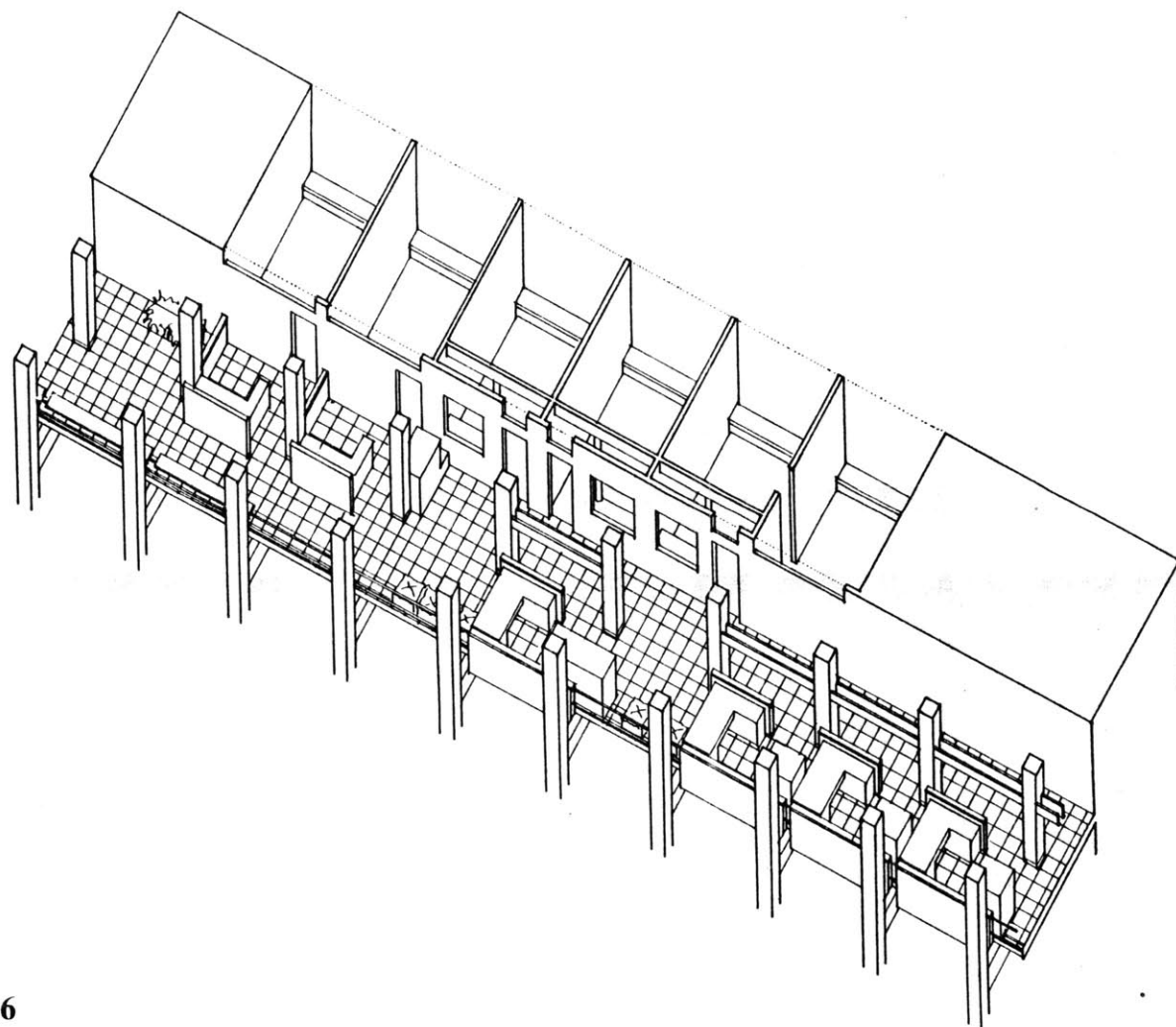
The design for the three assembly volumes assigns different physical attributes according to their respective



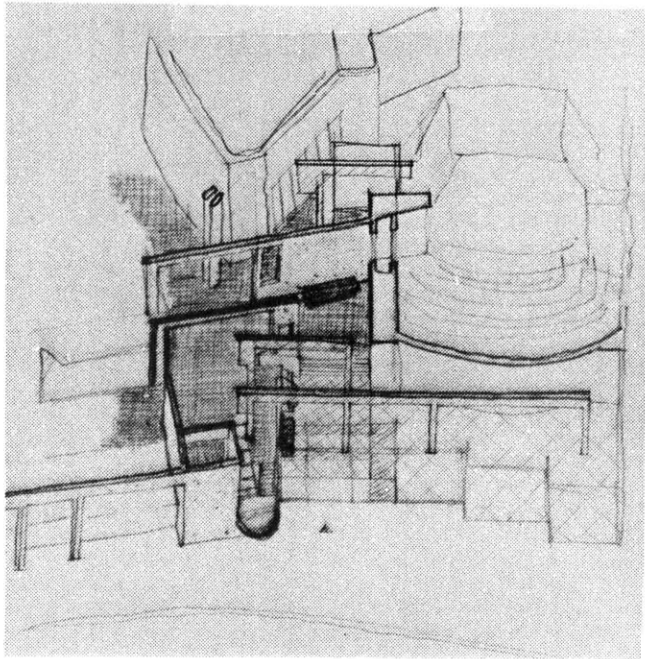








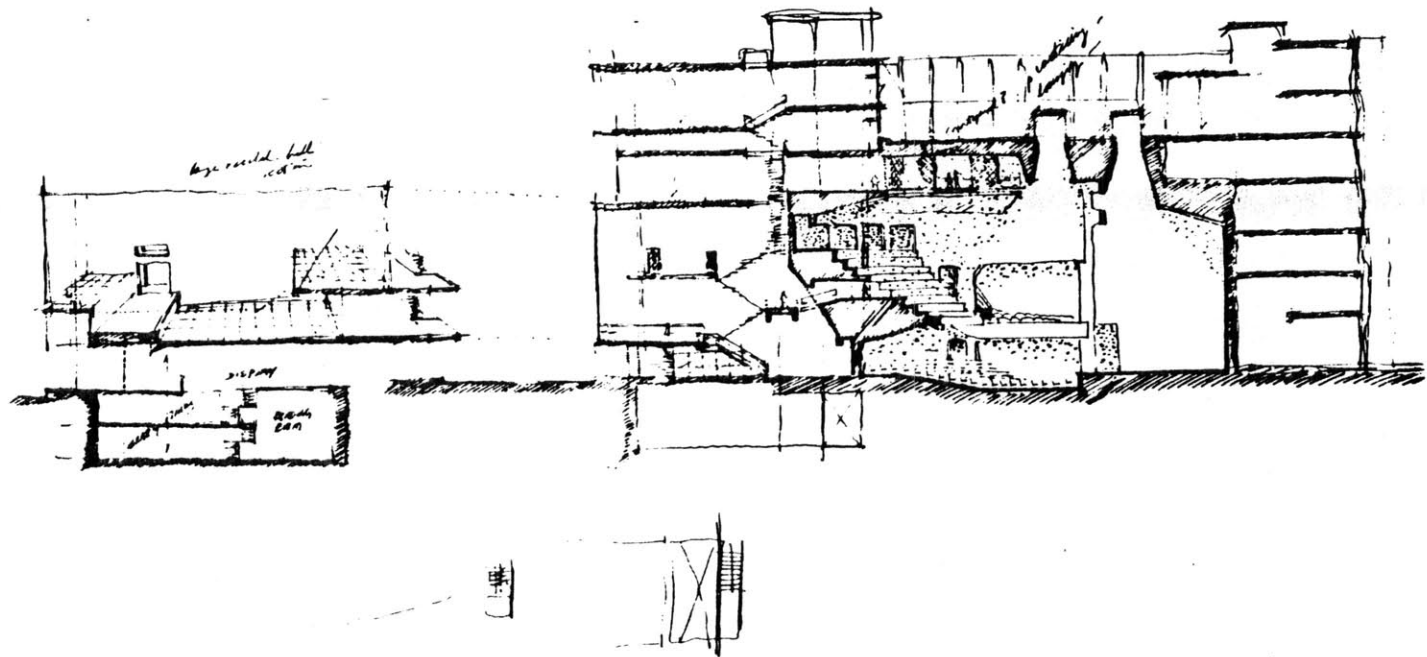
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roles and activity characteristics. The smallest assembly volume is a recital hall for 300, intended largely for use by students and faculty who give recitals as part of their academic program. As such, it must possess an intimate character within as well as in its entry/lounging area. A small volume with a stepped floor pattern is provided to the Huntington Avenue side of the modified lobby, allowing it to be perceived as somewhat separated from the larger scale forms and activities of the large lobby itself, although a modulated, framed view of the large lobby is provided from here.

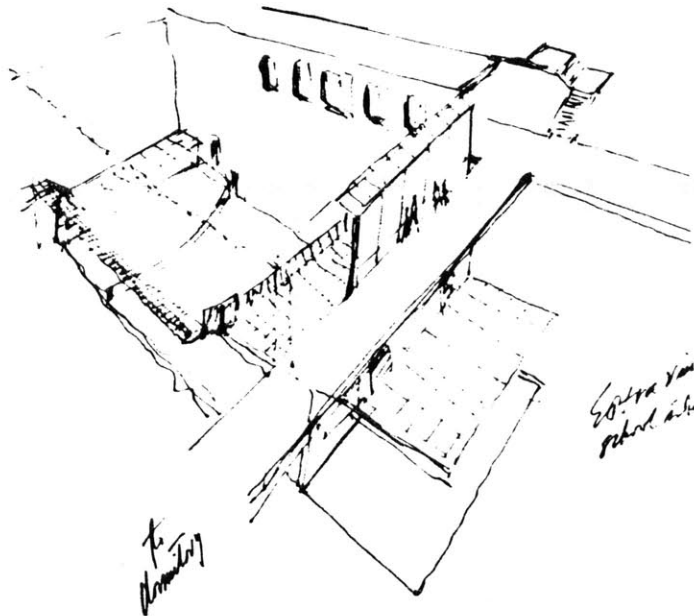
Space on the ground level below the stepped seating can be used for a music shop, which calls for a point of access control in this area. The access control can double as security control for this secondary entry area.

29



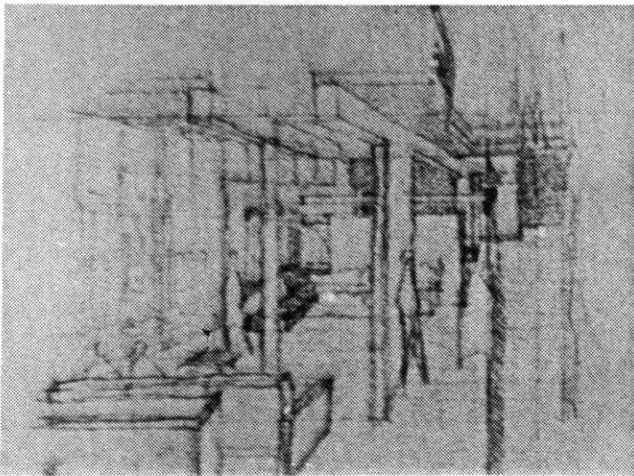
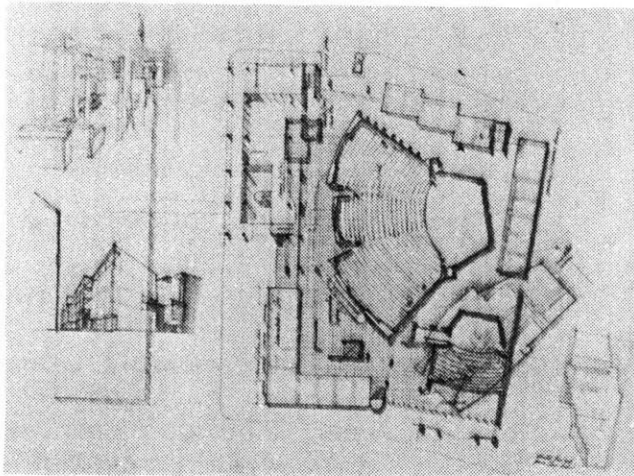
Because the largest assembly volume assumes the role of primary public gathering facility for which the activity demands are highly specific (i.e., concerts and recitals of mostly absolute music), the middle-sized assembly volume presents itself as one part of the building where a great amount of flexibility is desirable. It is large enough to warrant use by various forms of gathering other than presentation of instrumental music. For this reason the middle-sized assembly volume was placed in such a way as to present a large extent of its boundary to the public domain of the unified lobby, while its very location enables it to play a somewhat smaller role in that public domain compared to the largest assembly volume. It is placed to one side of the building entrance facing the introductory foyer portion of the lobby, and its main level is elevated to accommodate the

28



library below. The perceived boundary of this middle-sized assembly volume extends slightly beyond its physical boundary to include an entry hall on two levels. This entry hall provides a zone of transition from the lobby proper. The floor and the balcony, both flat, provide for gathering events such as a banquet or a dance. The seating elements consist of primarily movable folding chairs and a fold-out stepped seating on the main part of the balcony level. The movable and folding seating elements enable the hall to transform from a large rectangular room with two flat levels to a full-capacity performance space, seating approximately 500 with adequate view of the stage. The balcony extends in a narrow strip to surround the hall on three sides approximating a theatre-in-the-round arrangement. The side without a balcony level, toward the main mass of the building, is perforated

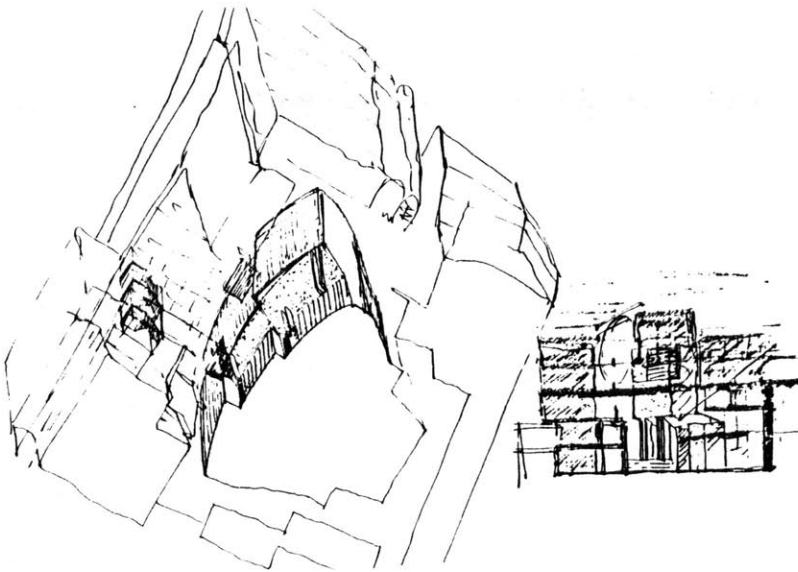
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with window-size openings. These openings and a horizontal strip above the main portion of the balcony can be provided with a double layer of operable elements, one forming a visual barrier and the other an acoustical (typically curtain or screen and glazed sliding windows). Such openings enable casual participation of outside passersby in the activity inside.

The physical form of the largest assembly volume is primarily generated from within. The seating configuration is intended as a compromise form between the extremes of the rectilinear fan shape, whose singular directionality aims toward a frontal view of the performance from every seat, and the theatre in the round, in which the view of the audience itself is a valued part of the experience.⁽¹³⁾ While the positioning arrangement of the classical ensemble or orchestra and their instruments is conceived with a

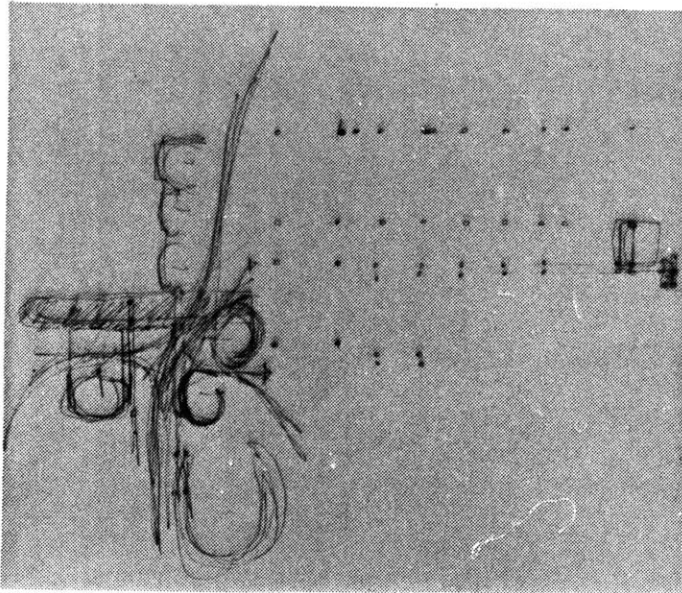
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singularly directional stage in mind (the orchestra opens up toward the audience), radial distribution of the audience can decrease the distance of most seats from the stage. Additionally, and perhaps more importantly, the intimacy of the semi-round or similarly shaped concert hall is often cited as a determiningly positive factor in the experience of visiting such a hall. Recent examples in this category include Hans Scharoun's concert hall in Berlin and the music center in Utrecht mentioned earlier.

The resulting shape of the largest assembly volume, thus resembles a fan opening widely and radially around the slightly thrust stage. Sections of the fan are articulated individually, through the back wall fragmented into three sections, and the internal distribution. The back surface, broken up thus, thrusts out over the lobby to

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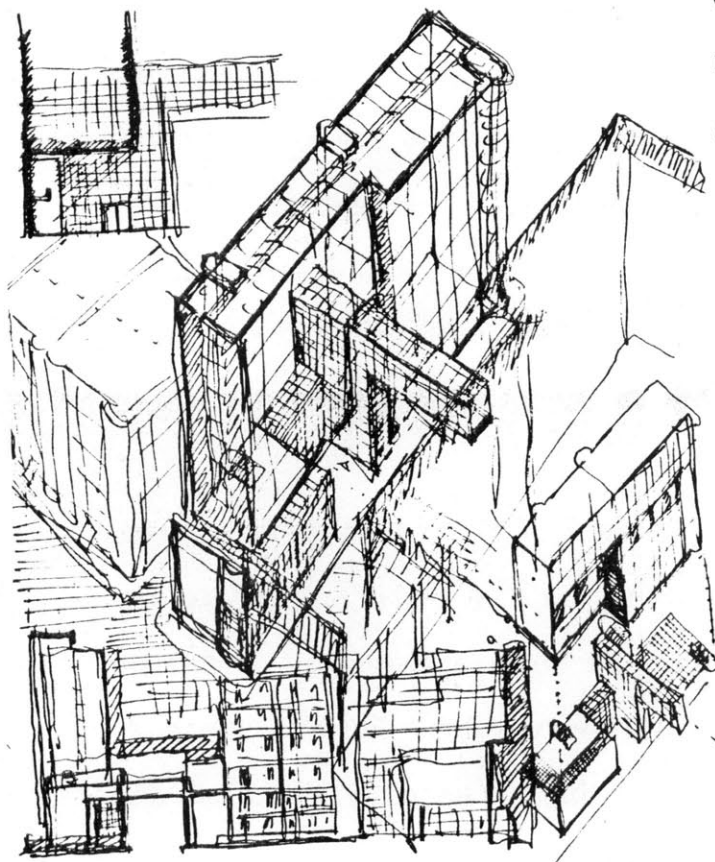


include balcony level, and serves as a principal defining feature of the unified lobby.

The unified lobby is represented by the residual volume created by placement of the three assembly volumes and the linear run of rooms accommodating daily school activities. It is the binding element of all parts of the building in terms of activities and its role in the building's organization and form. Some of its aspects, as directly represented in the graphic document portion, are recapitulated below.

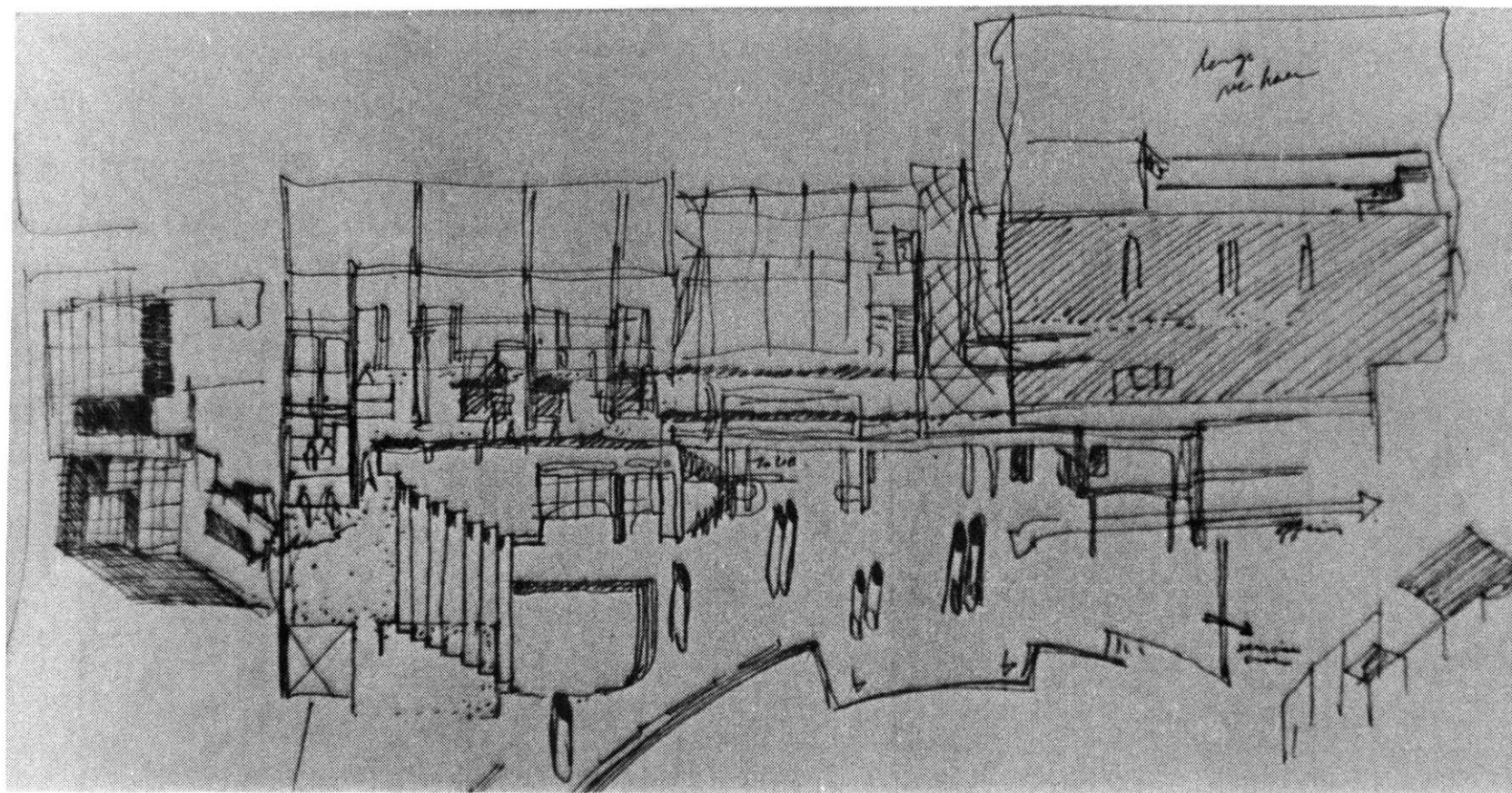
The plan form of the lobby consists of two parts, accommodating the primary and secondary entry to the building and the main portion inbetween. The main entry is essentially a two-story volume between the ends of the lower levels of the linear run of office rooms and the front face of the library and the middle-sized assembly


35



volume above. It forms the end of the introductory sequence of approach off Huntington Avenue. One turns off Huntington onto Gainsborough, to find a virtual niche formed by the building masses of the Conservatory and its dormitory buildings, joined across the Gainsborough Street at middle-level by an enclosed bridge. Proceeding through the colonnaded walkway with display areas for future events, one can already discern the lobby entry with its protruding staircase, people in movement within, and with a substantial quantity of interior lighting transmitted through the glazed surface of the entry. The main entry forms a transition between the experience of approaching the building and that of entering the lobby proper and approaching the concert hall. The concert hall becomes, through its volume, a smaller building within the rectilinear building mass which one

36





just entered moments ago. The main entry contains an area for ticket sales, security control during off times, and a main stairway to the upper levels of the concert hall, the middle-sized assembly volume, and the school activities. It also provides direct access into the library occupying the area below the mass of the middle-sized assembly volume. Situating the library this way provides, in addition to direct accessibility, a way to display a symbolically and practically important part of the school's daily operation to the performance patrons. Locating a checkpoint of the entire building in the entry near the library entrance allows it to double as a checkpoint for the library.

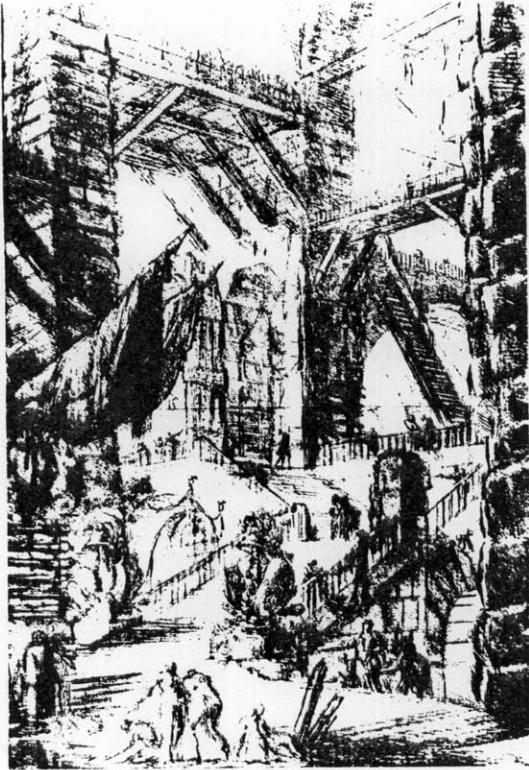
An alternative way into the building exists from Huntington Avenue. This entry serves the small recital hall and the music shop directly on the ground level.

The music shop serves the needs of the students and faculty as well as outside customers who can enter the store directly from Huntington Avenue. Visiting the music shop while attending a concert provides an additional excitement of being able to find scores and recordings of the evening's music. This second entry is connected to the lobby proper through a fluid flow of space among angular elements of the auditorium forms and lobby features.

The lobby proper fluctuates in size and character from one locality to another within. The residual volume among the defined building parts enlarges significantly to encompass a full four-story height.

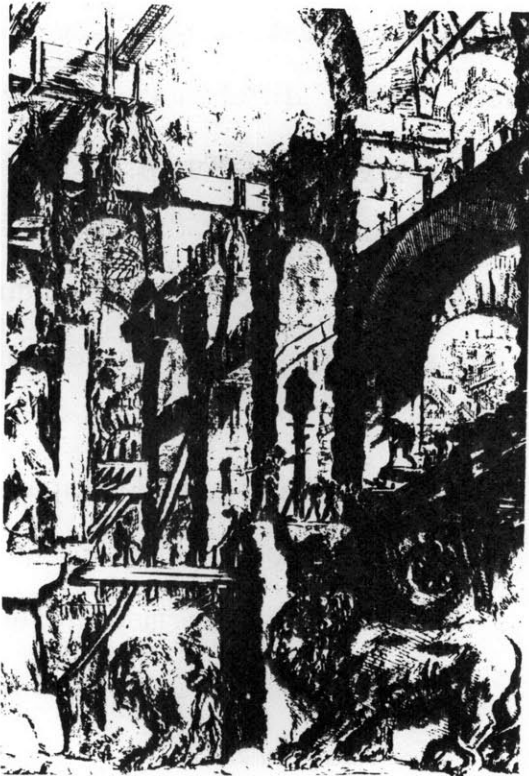
The lobby occupies the residual volume resulting from juxtaposition of defined building parts and reveals compressed and expanded spatial forms, and

31



intimate and distant views of various places within. Looking longitudinally, the columns in the lobby are spaced at minimal intervals to enhance the density of the visual field and to provide interpretable sub-areas within the lobby. Freedman⁽¹⁴⁾ reports that crowding in any given situation, pleasant or unpleasant, has an effect of intensifying its experience. Along this line, crowding becomes a desirable condition in a festive or ceremonial gathering. The minimal column spacings are utilized here to enhance that condition by providing interpretive sub-areas within the lobby. Where a given space is too large to achieve effective positive crowding, Freedman notes, people tend to gravitate toward a defined sub-area to induce local crowding. Possibilities for finding such sub-areas must be built into the lobby to provide for its use at less than its full capacity. The large overall size

32



of the lobby, accounting for full-capacity conditions of distribution and visual accessibility, is modulated by these columns to define interpretable sub-areas where local intensification can occur. For example, when routine school operation is the sole activity in the building, the vast central volume of the lobby acquires the character of a passive courtyard with much of human inhabitation occurring around it.

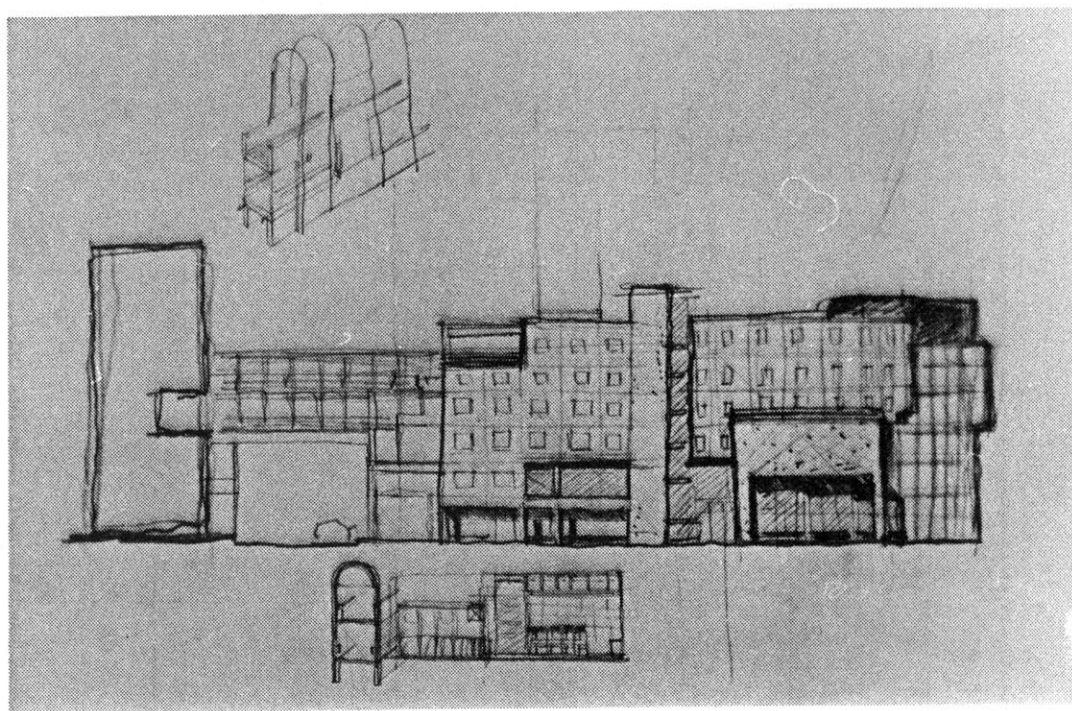
The aspirations and tendencies of the lobby space can be compared to the much more grandiose fantasies found in drawings by Piranesi. While the intimidating enormity and the perspectives beyond reality of the spaces of Carcieri projects past the scope of the aim of this lobby space, the simultaneity of numerous built elements encompassing the total visual field seems to characterize the affinity. Significant expansion of the

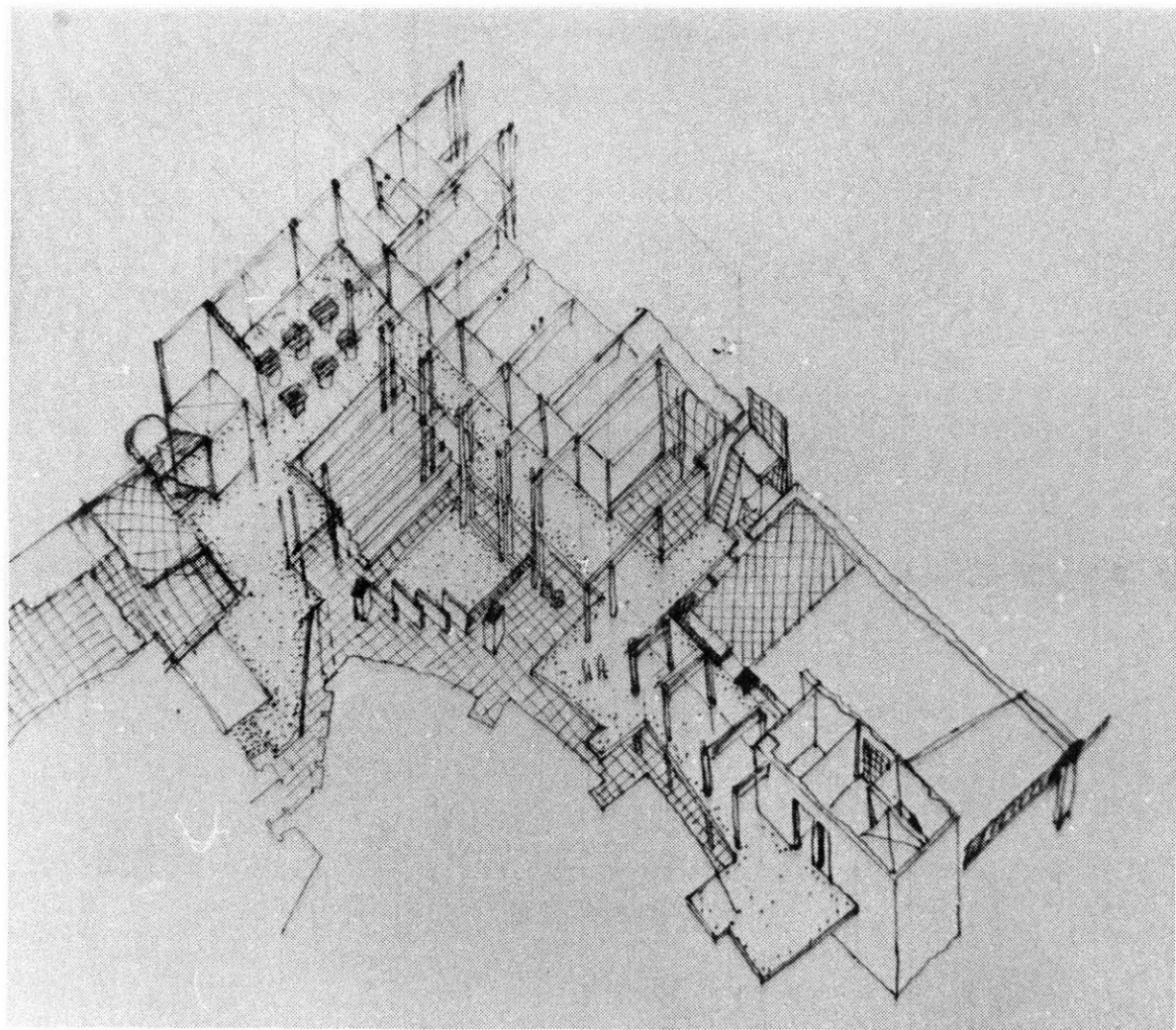
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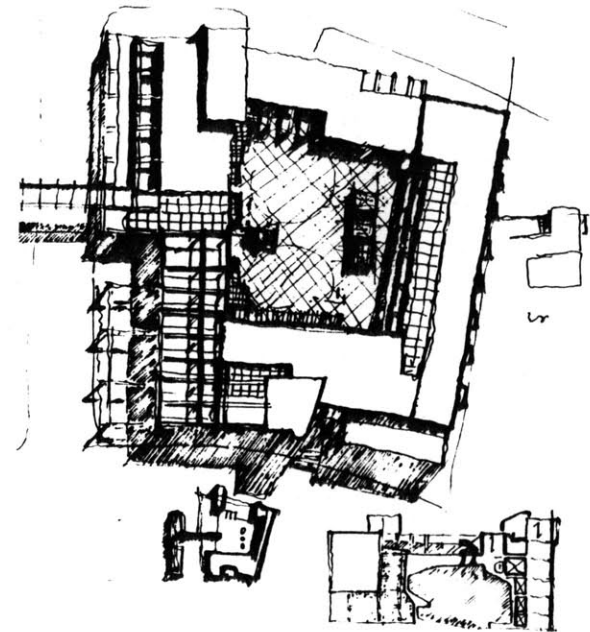
interior volume occurs underneath a skylight and the mass of the concert hall balcony. A stepped seating form is placed in this area as a major lounging element in this lobby space. The stepped form which recalls the prototypical audience seating of theatres and also the public stair form negotiating level differences between elements of civic importance, is placed here as an alternative way up to balcony levels, and as a direct access into the refreshment area, itself an important focus within the lobby both for special events and for the daily school community.

From the refreshment area's seating, an encompassing view of the lobby space is possible. Furthermore, the stepped area forms a stage set for informal presentations by student musicians and it can be a place for open activities concerning the school community.





Both the refreshment area and the library, observable and accessible from various parts of the lobby, may keep longer hours than the rest of the school activities, providing signs of life in the lobby environment throughout the time of the building's daily operation and its public gathering events.



120

V. GRAPHIC DOCUMENTATION

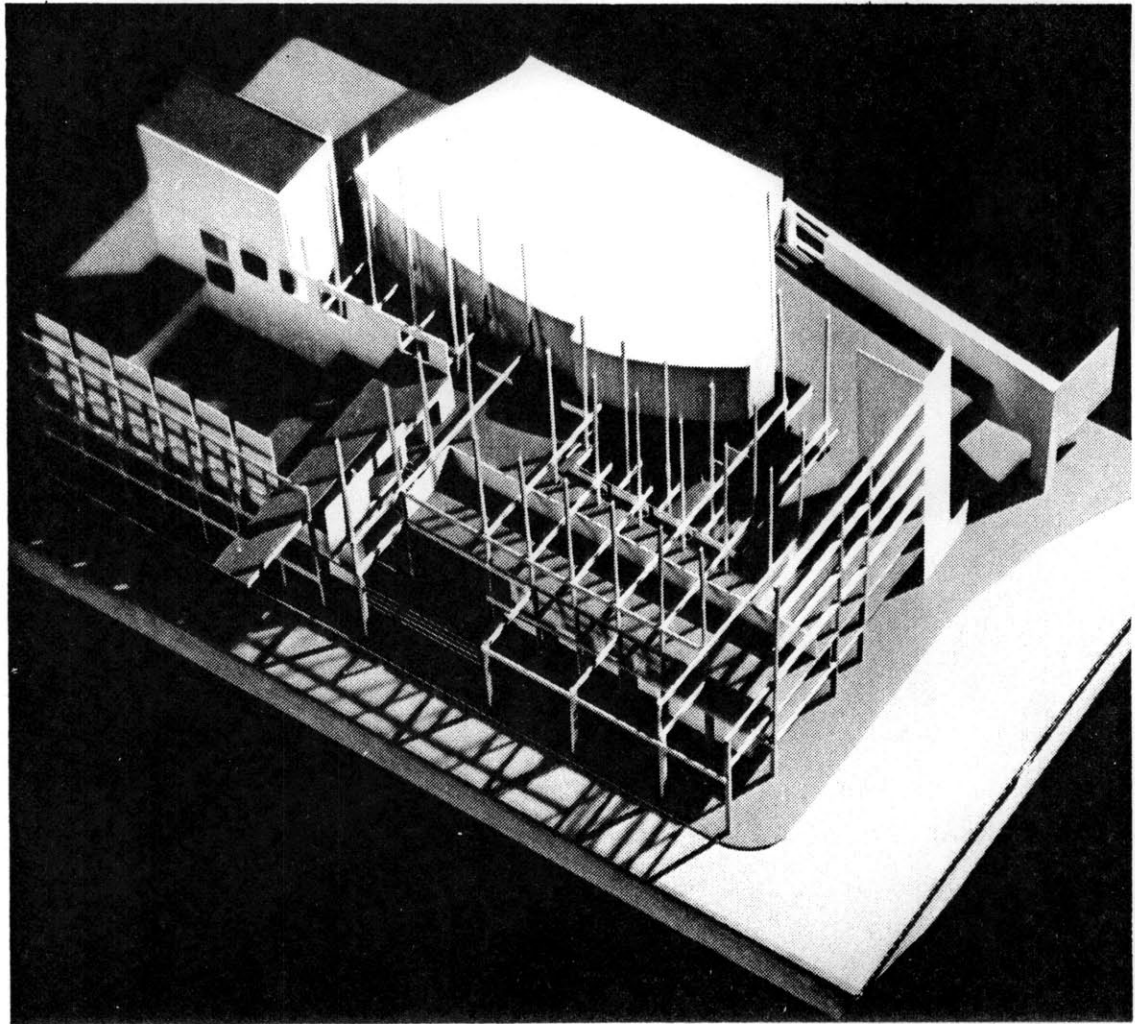
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5. GRAPHIC DOCUMENTATION: SCHEMATIC PROPOSAL

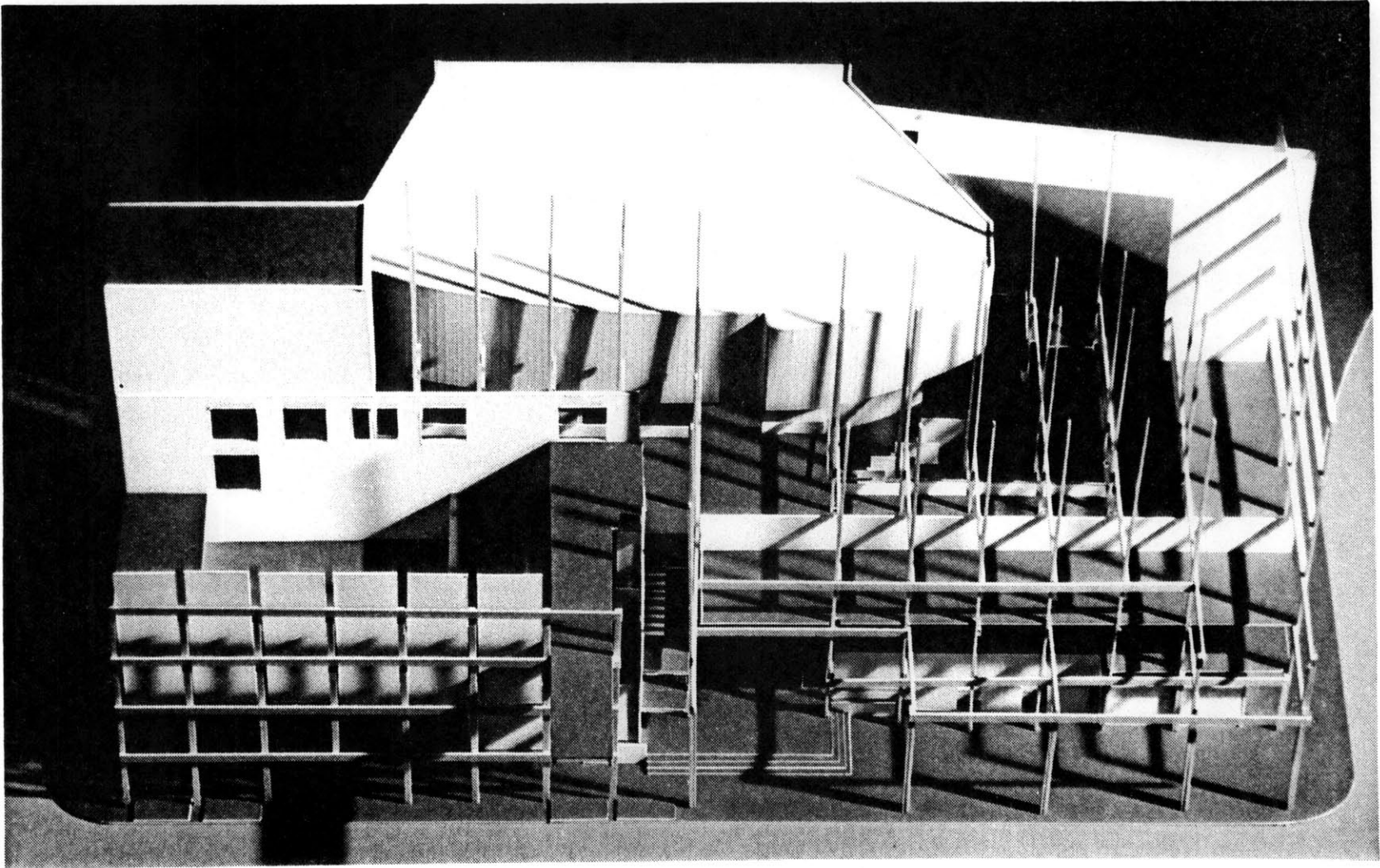
5.0 List of Figures

1. Study model: overall view: down from corner of Gainsborough and Huntington.
2. Study model: overall view: down from Gainsborough side.
3. Study model: Gainsborough elevation.
4. Plan: ground level.
5. Plan: second level.
6. Study model: perspective from corner of Gainsborough and Huntington.
7. Approach toward entrance.
8. Section AA'
9. Section BB'
10. View into lobby.
11. View of the stepped lobby seating.
12. Axonometric.

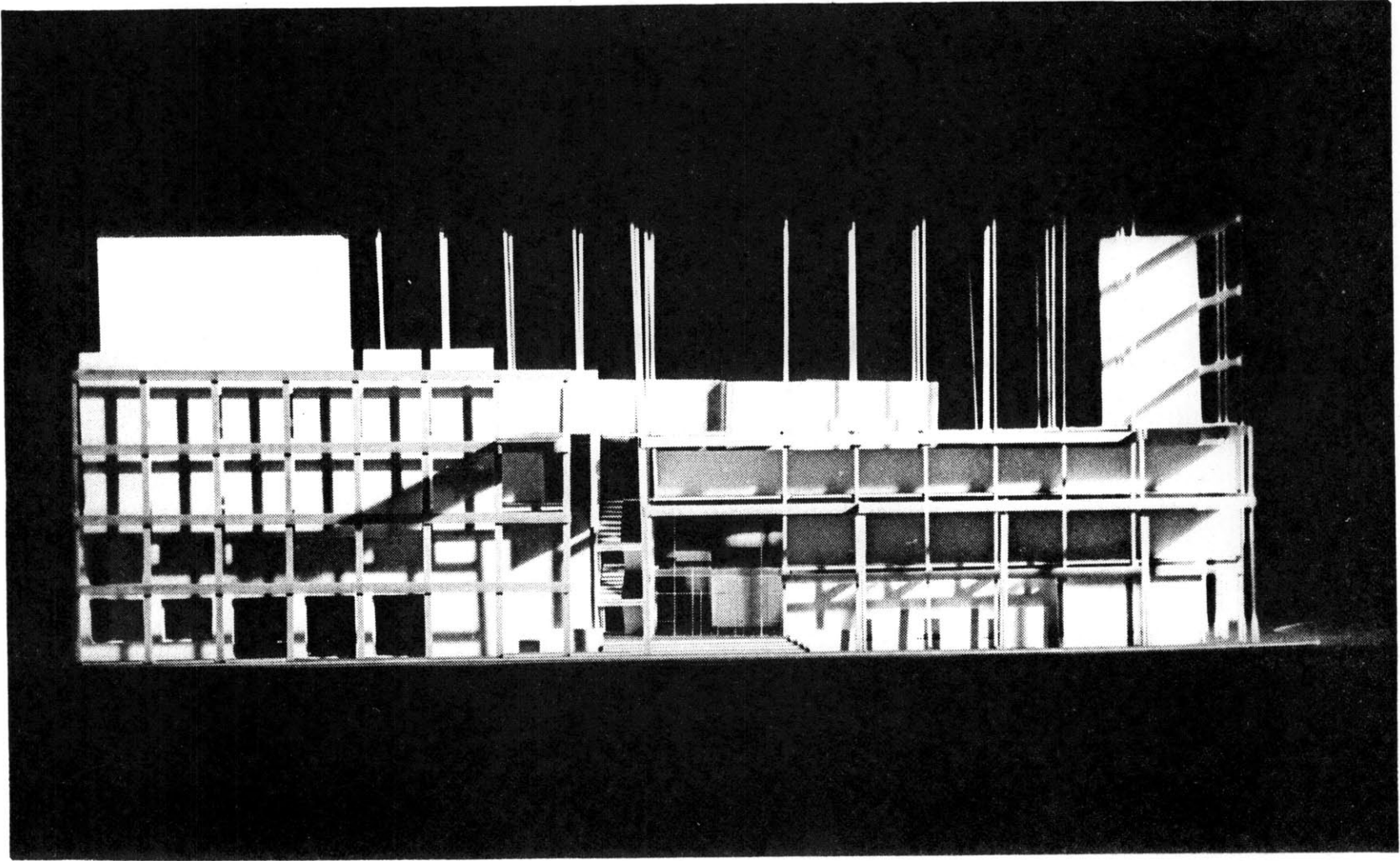
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186

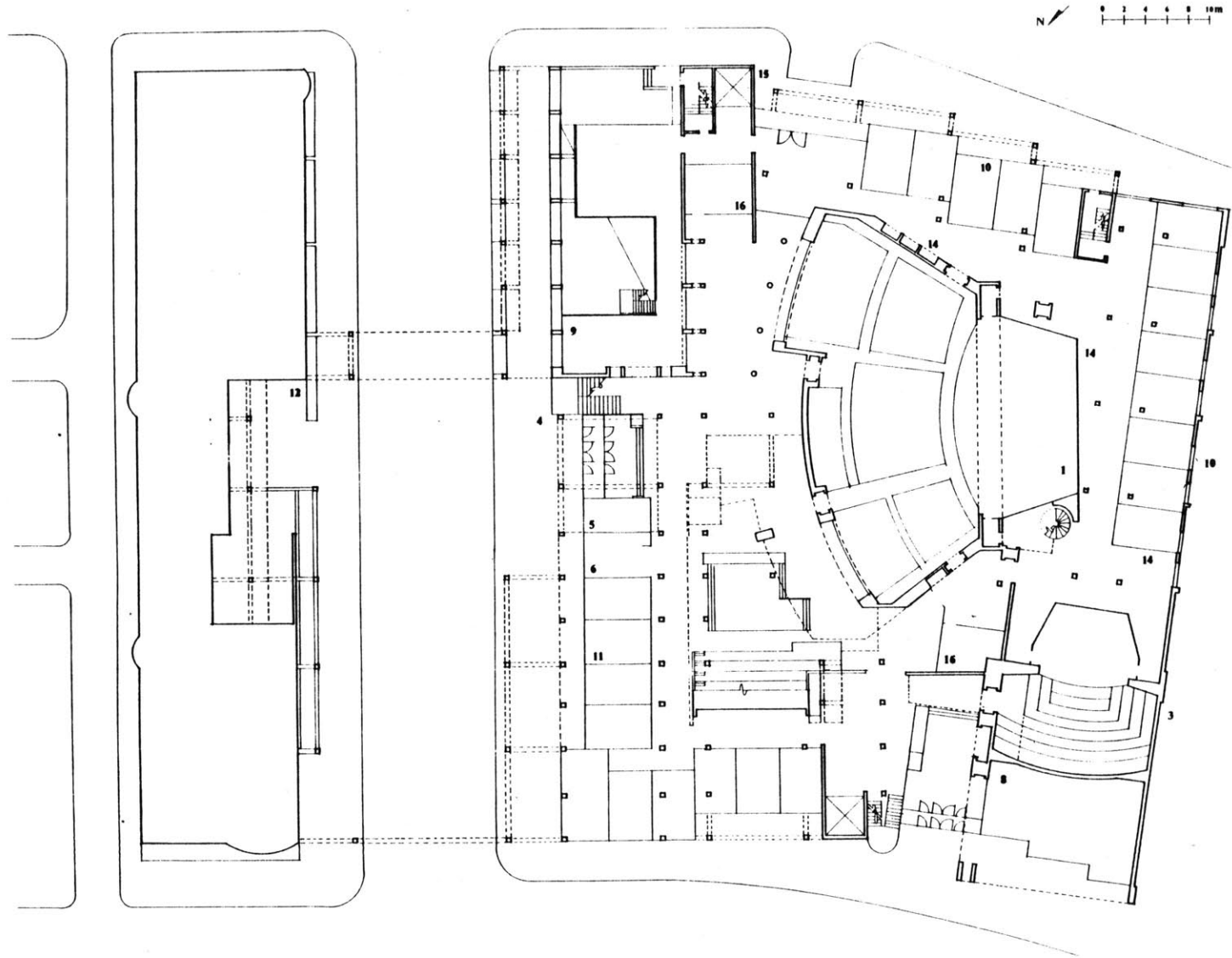


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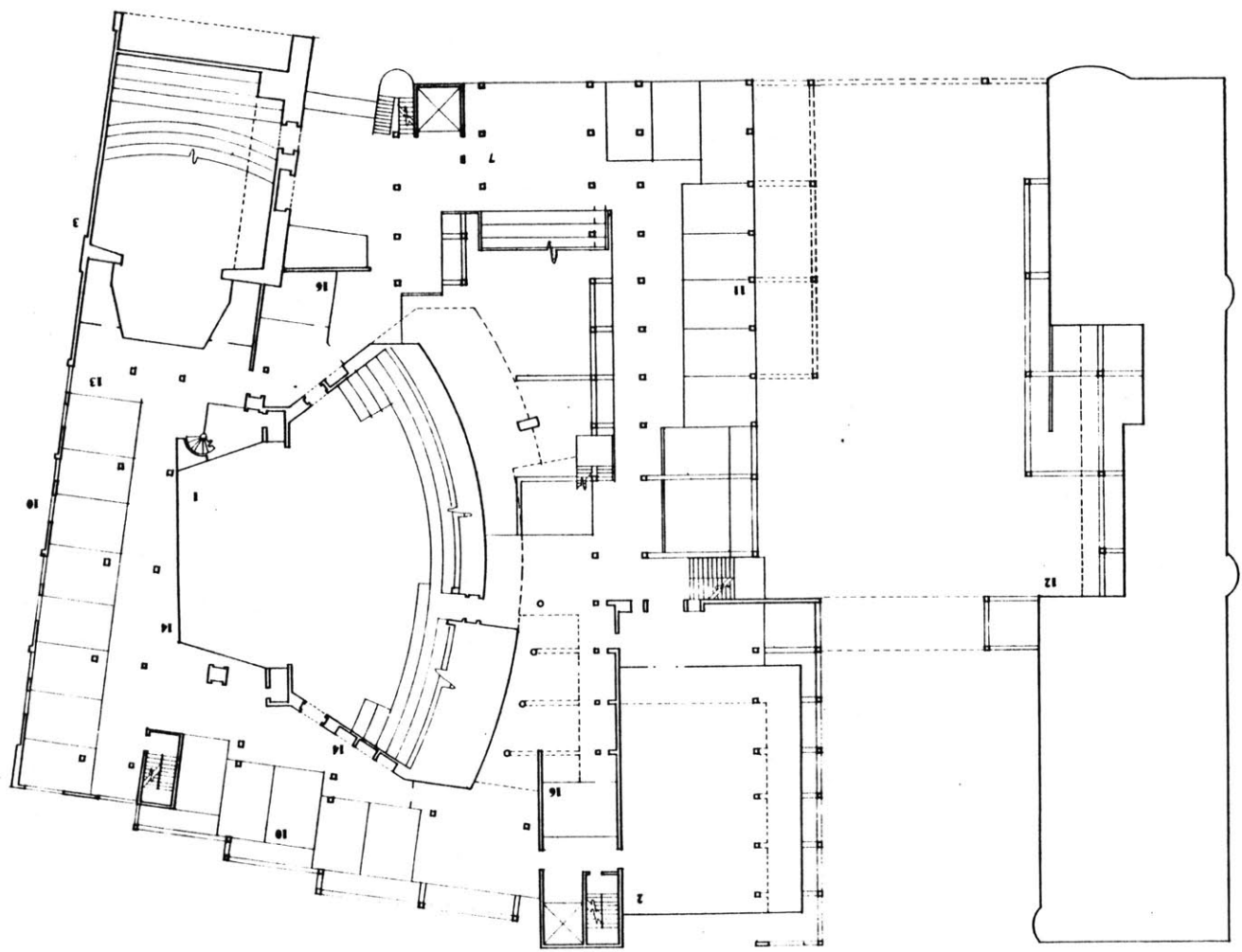
PLAN: GROUND LEVEL

1. Auditorium A
2. Auditorium B
3. Auditorium C
4. Entrance
5. Tickets
6. Coats
7. Refreshment
8. Music Shop
9. Library
10. Instruction Rooms
11. Offices
12. Performers' Lounge
13. Storage
14. Loading
15. Restroom

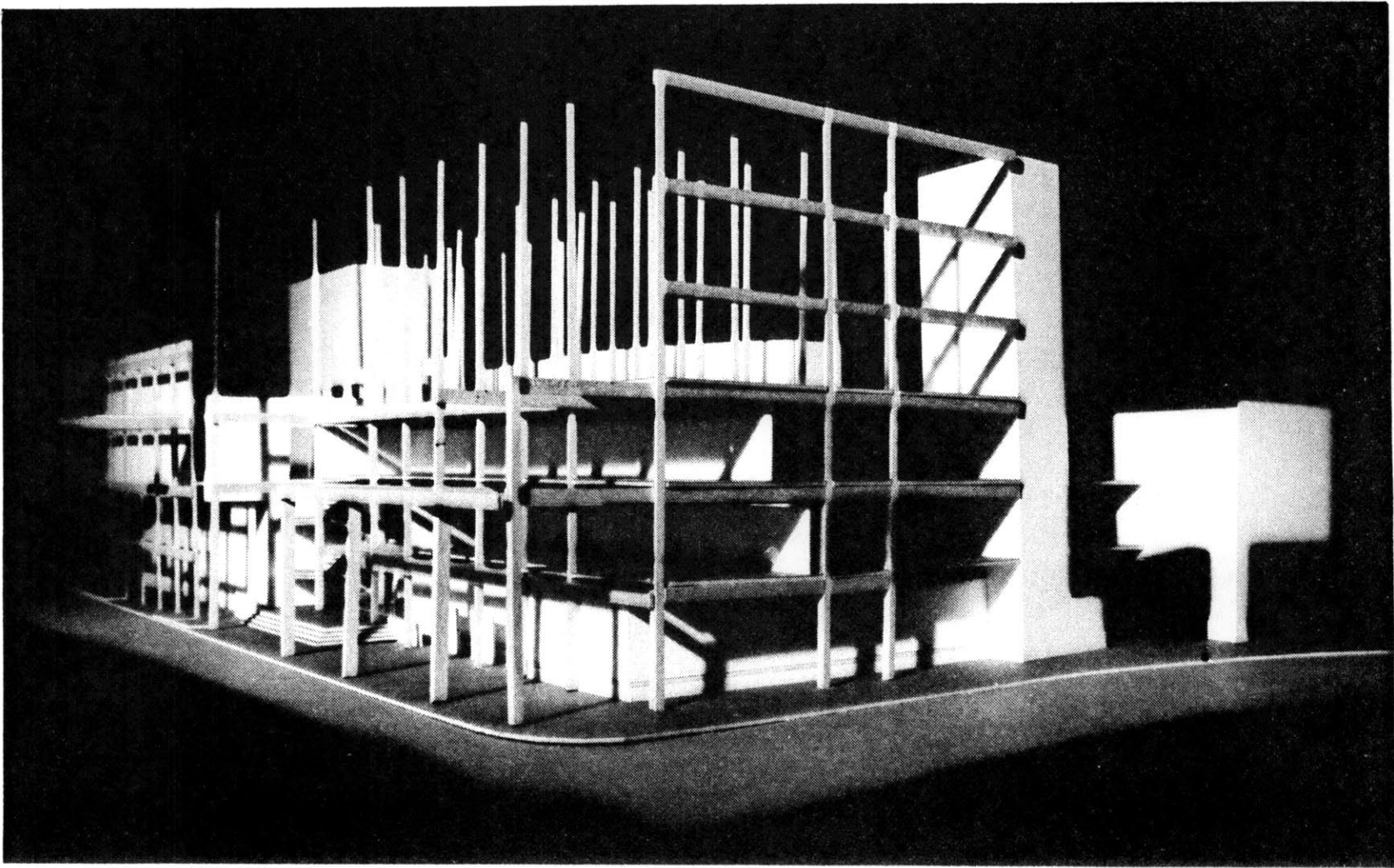


PLAN: SECOND LEVEL

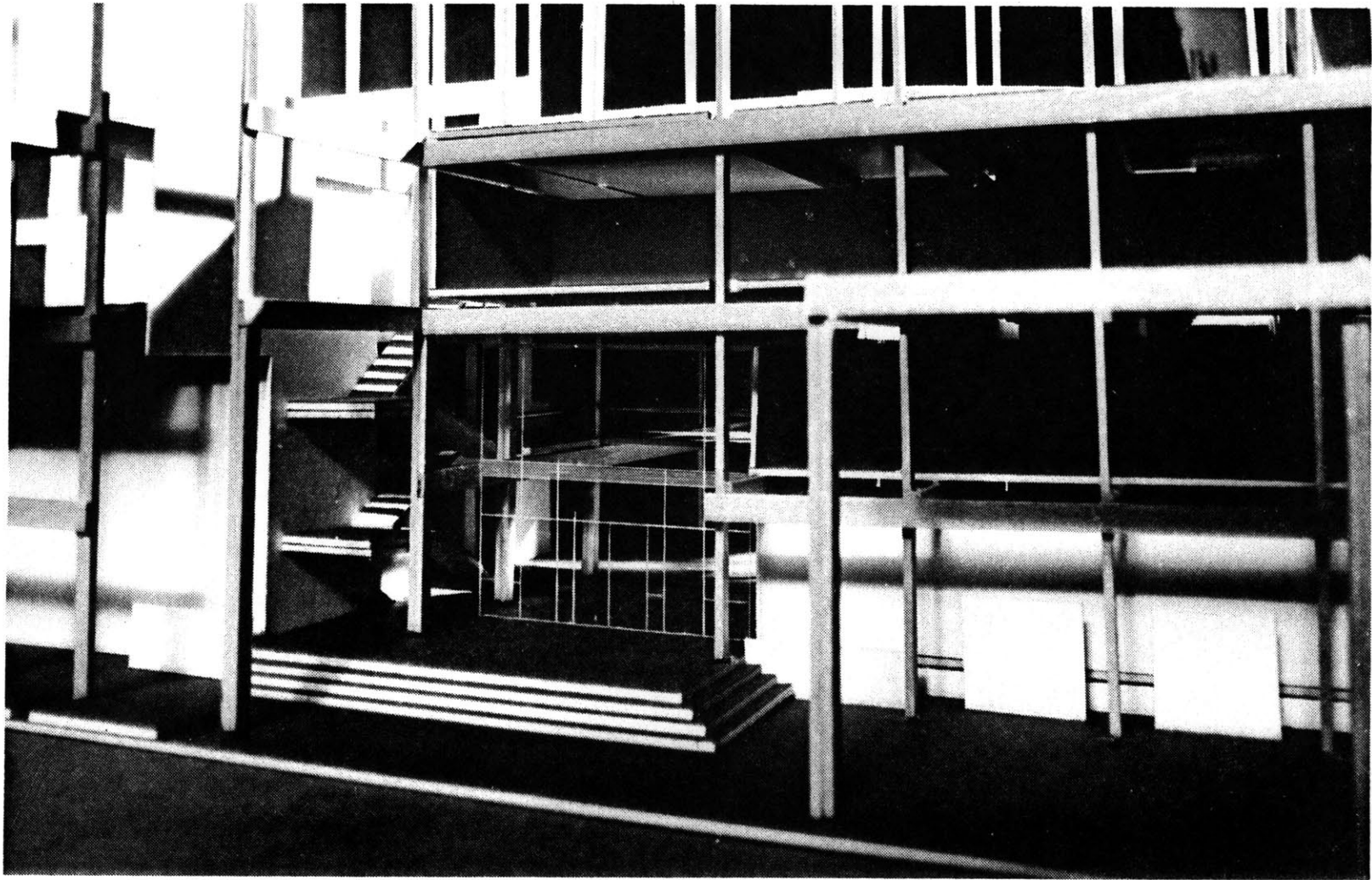
1. Auditorium A
2. Auditorium B
3. Auditorium C
4. Entrance
5. Tickets
6. Coats
7. Refreshment
8. Music Shop
9. Library
10. Instruction Rooms
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15. Restroom



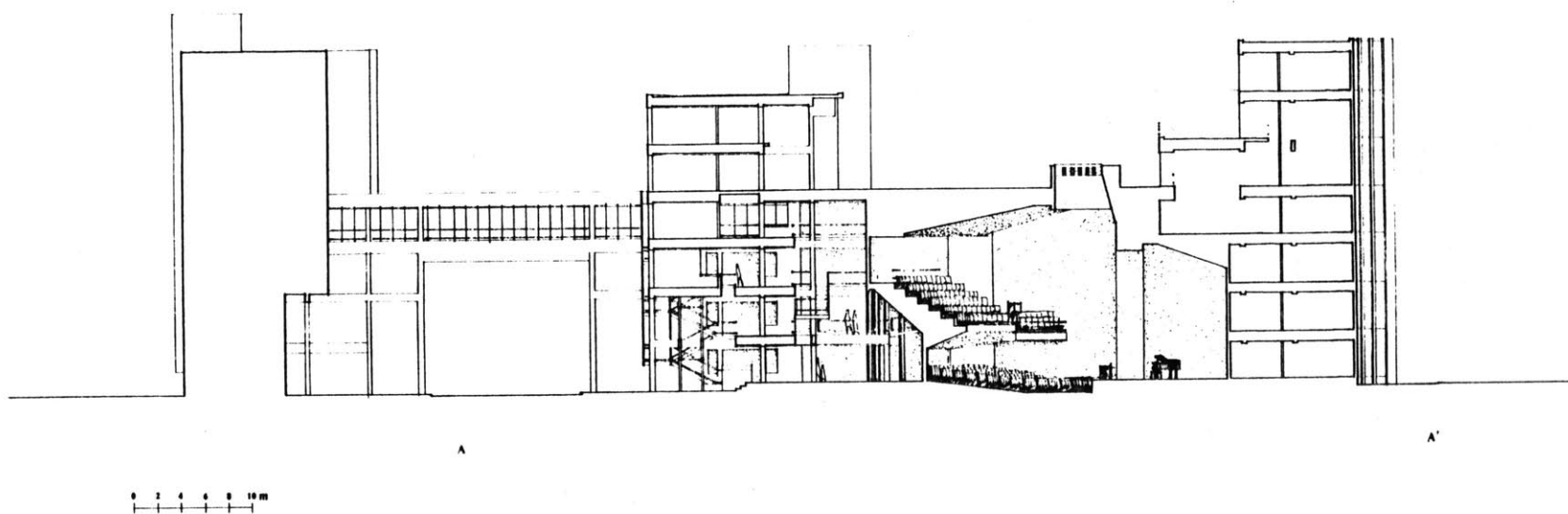
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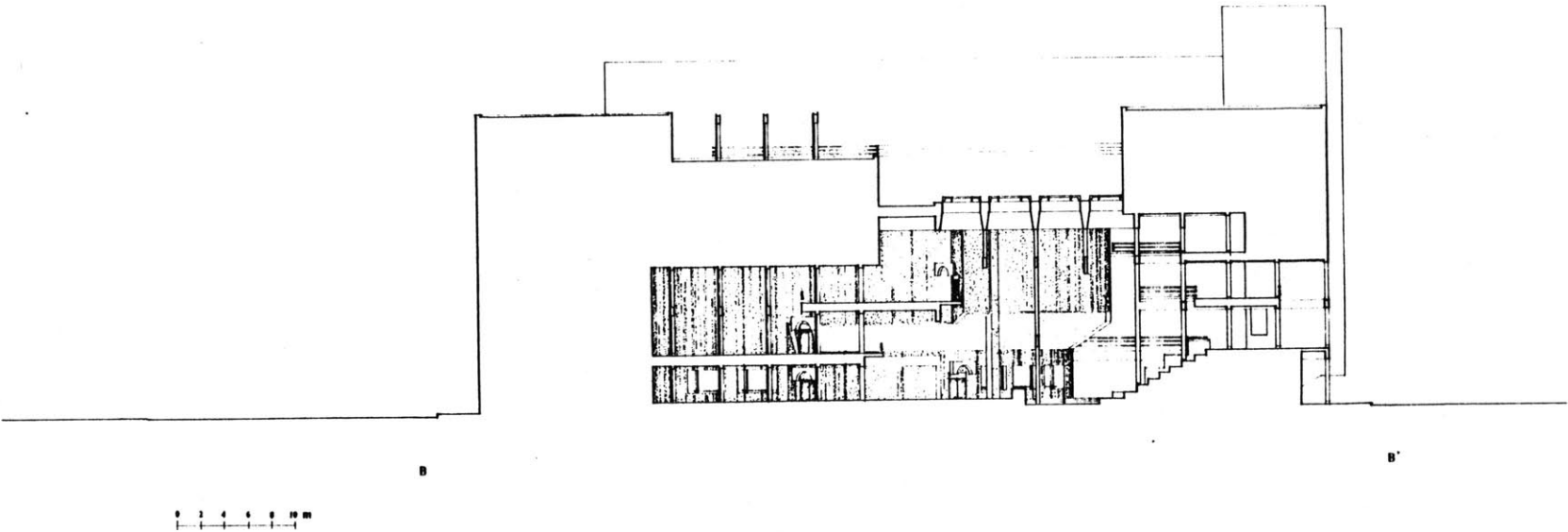
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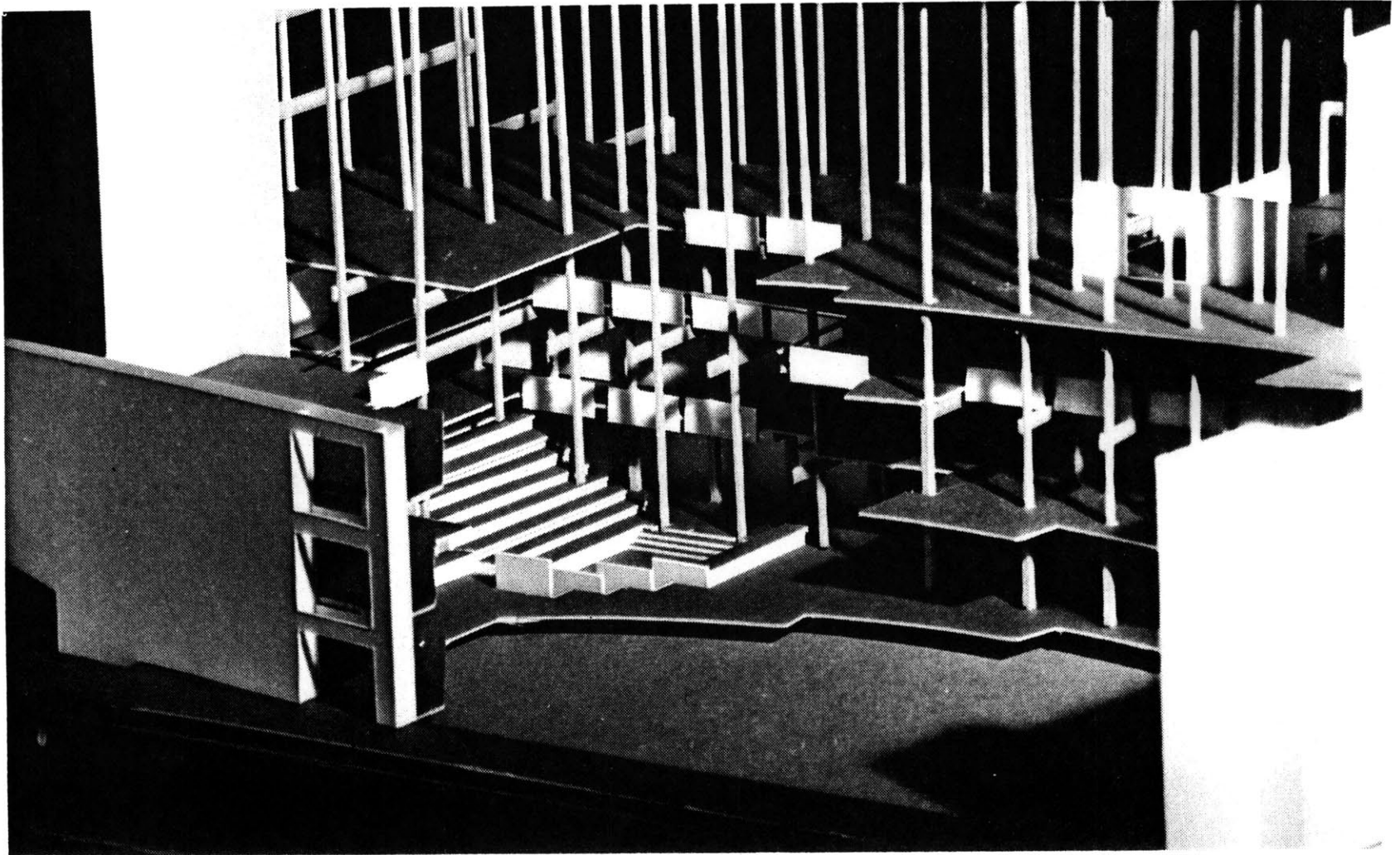
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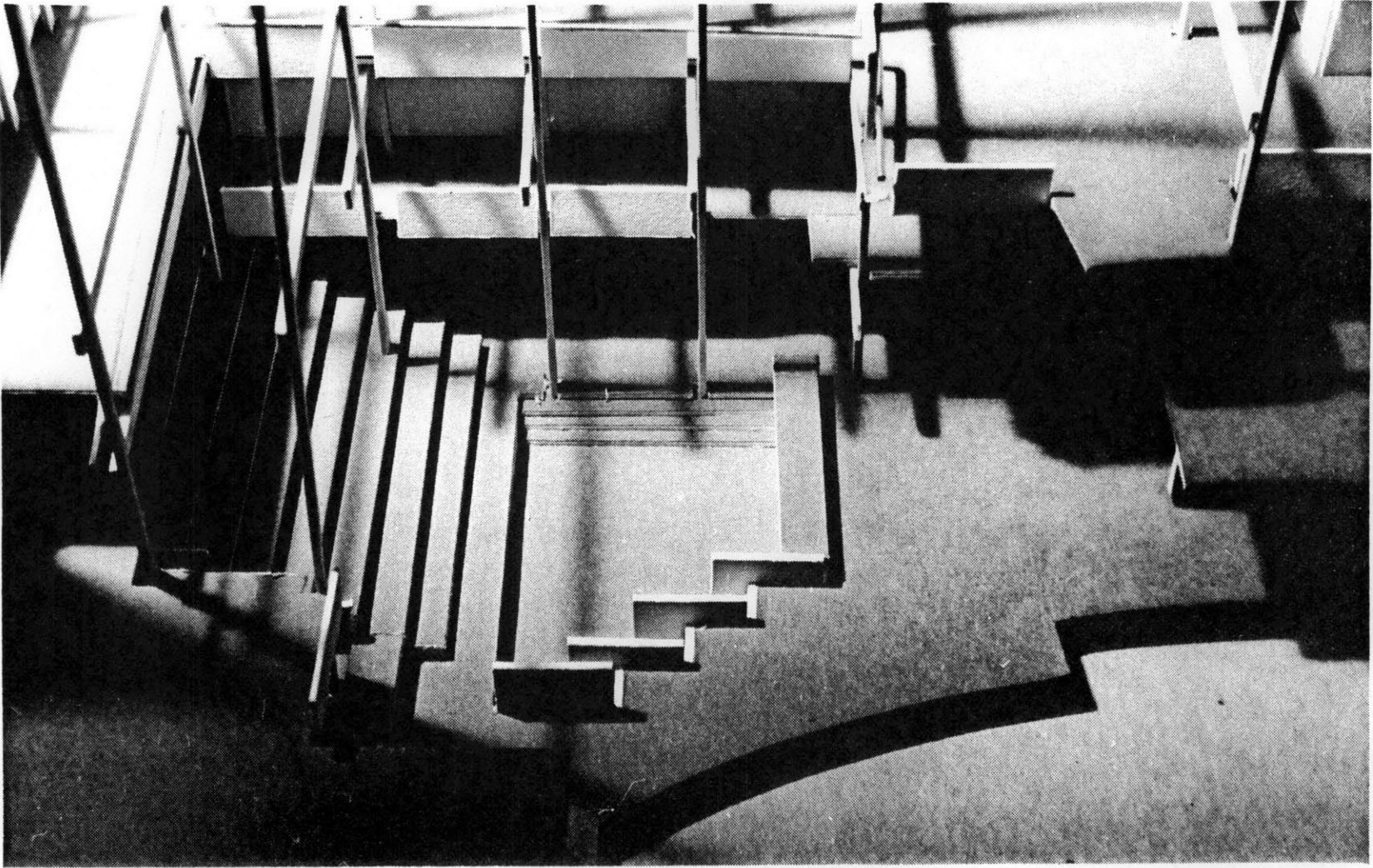
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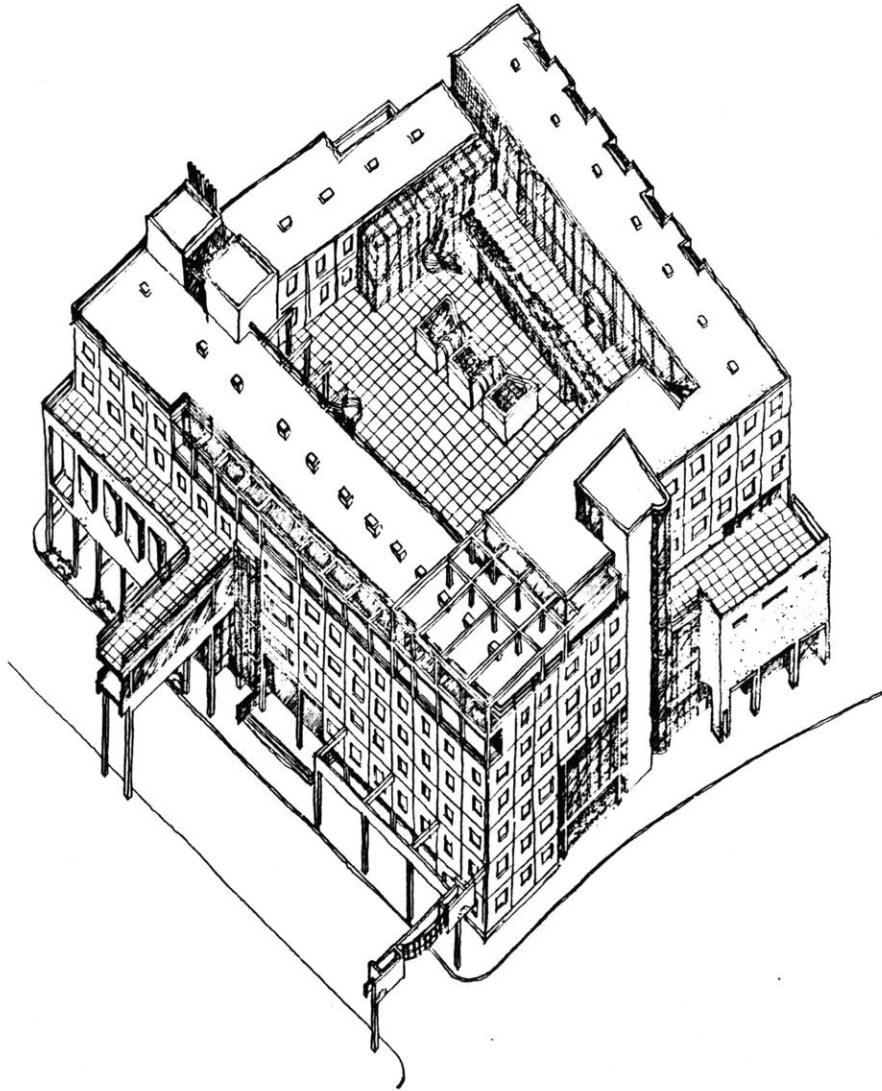
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200



206



208

VI. SUMMARY

210

6. SUMMARY

Through the earlier stages of studies examining the existing facilities of the New England Conservatory of Music and other sample buildings, it became apparent that the interaction of various activities within a building is represented most directly in their distributive spaces. While such interactions may under certain circumstances lead to conflicting conditions of spatial continuity, they can, on the other hand, play a significant role in shaping the experience of being inside such a building.

Design studies sought to bring about resolution of these distributive spaces to accommodate a multiple set of spatial associations attributable to various activities. Thus the presence of a multiple number of activities within a given building can serve as a generative source for the overall building form, its identity and experience within.

2/2

A major determinant in formulation of approach here was the grasp of the distributive spaces as forming a certain nucleus to the building as a whole. The unified lobby emerged as such a nucleus both in terms of its physical existence and its associative characteristics. The lobby fuses various interstices occurring among independent volumes to form an equivalent of a courtyard where inhabitation can occur in it or around it under high or low intensity of activity, respectively.

Beyond the particular example that the design exercises yielded, areas of interest for further pursuit are identifiable. A systematic overview of methods of spatial disposition should clarify the relationship between this particular building type and its possible physical form. Studies into the vocabulary of generating interpretable subspaces within a large open volume, as briefly

discussed in the last chapter, may be of value. Finally, the understanding of the implied transparency of fluctuating zones of influence may benefit from a more concrete grasp of the reference frame of time over the life-cycle of the building's existence.



7. NOTES

1. Music Center, Utrecht (Hermann Hertzberger, architect) may be cited as an example which attempts to immerse the concert hall in a sea of active surrounding, the street.
2. Much of information here has been extracted from the sources listed in the bibliography section. In addition, an interview with the superintendent of the building at New England Conservatory was helpful in obtaining the sense of the building's operation, needs, etc., and in obtaining scattered fragments of construction documents which were the sole source for plans for the two additions. Those were superimposed on the 1903 plan of the original building (see bibliography) and then adjusted through on-site observation to yield the drawings of the existing building presented in this section.

3. Constructed from monthly schedule of events, the New England Conservatory, February 1981.
4. The Conservatory holds approximately 125 rare instruments in its collection. Most are reportedly too fragile for actual use, but a more extensive exhibition display program may be accommodated. See Music Library Association: A Survey of Musical Instrument Collections in the United States and Canada.
5. There seem to be numerous studies on windowless classrooms and offices. At the most intuitive level, the notable effect of not having exposure to the outside through a window may be that the level of isolation felt by the occupant of a space reaches a higher value when the space is discrete and small. In a large continuous space, opportunities for diverting one's attention from his immediate task

2/6

and assuring himself of the surrounding world exists through more distant views within the space and interaction with other occupants of the space.

6. An independent section is allocated in the bibliography portion to list the buildings mentioned above, with sources for graphic information where applicable.
7. Quote from Hertzburger's accompanying note to published documentation in A & U, April 1980, page 72.
8. *Ibid.*
9. Analysis of this one building was based solely on published documentation since its location prevented first-hand access and observation. As such the interpretation here may not do justice to the architect's work. However, observation of, and reaction to, this building plays a substantial role in the later stages of the design exercise.

10. Portoghesi's analytic work on Baroque architecture presents a background for his design work as illustrated in the accompanying figures.
11. See D. Porphyrios for discussion of Aalto's manipulation of forms.
12. Doxiades: Architectural Space in Ancient Greece
13. The opposition of these two extremes, or actually of their believers, is still a major topic of discussion among the professionals in the field of theatre design. George Izenour and Iain MacKintosh engage in a lively exchange in their articles in Theatre Design around this topic.

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224

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